DOCUMENT RESUME

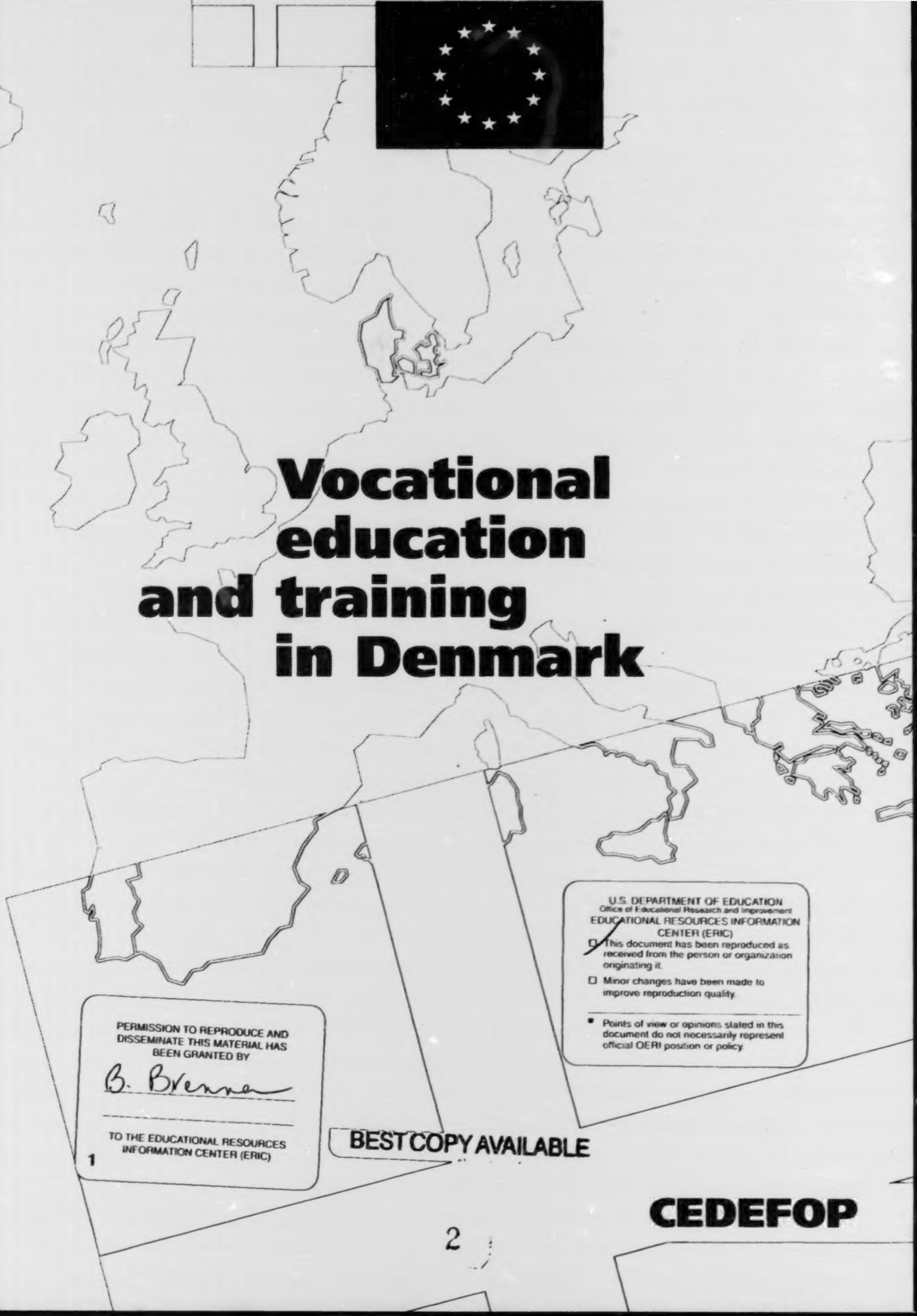
ED 469 801 CE 083 706

AUTHOR	Nielsen, Soren P.; Cort, Pia
TITLE	Vocational Education and Training in Denmark. Second Edition.
INSTITUTION	European Centre for the Development of Vocational Training, Thessaloniki (Greece).
REPORT NO	HX-21-99-795-EN-C
ISBN	ISBN-92-828-2258-3
PUB DATE	1999-00-00
NOTE	144p.; For the first edition, see ED 389 870.
AVAILABLE FROM	Bernan Associates, 4611-F Assembly Drive, Lanham, MD 20706-4391 (#7006 EN, 18.50 Euro). Tel: 800-274-4447, E-mail: query@bernan.com, Web site: http://www.bernan.com. For full text: http://www2.trainingvillage.gr/etv/publication/download/monograf/7006en/7006en.html. Also available in Danish: http://www2.trainingvillage.gr/ etv/publication/download/monograf/ 7006da/7006da.html.
PUB TYPE	Books (010) -- Information Analyses (070)
EDRS PRICE	EDRS Price MF01/PC06 Plus Postage.
DESCRIPTORS	Adult Education; Adult Learning; Apprenticeships; Continuing Education; Definitions; *Education Work Relationship; *Educational Administration; Educational Change; Educational History; Educational Legislation; Educational Objectives; *Educational Policy; *Educational Practices; Educational Quality; Foreign Countries; Futures (of Society); Global Approach; Glossaries; Lifelong Learning; Needs Assessment; Postsecondary Education; Private Sector; Public Sector; Secondary Education; Student Certification; Student Evaluation; Teacher Education; *Vocational Education; Vocational Education Teachers
IDENTIFIERS	*Denmark; Globalization

ABSTRACT

Vocational education in Denmark began with organized apprentice training in the early 1400s. In 1875, the government and municipalities began providing substantial grants to establish technical and commercial schools. Development of apprenticeship training continued through the 1950s. Since 1977, Denmark has had two parallel systems of vocational training--apprenticeship training schemes and vocational education and training (VET) programs. The 1989 Vocational Training Act established a general framework for the training field that had previously consisted of apprenticeship, VET, and basic technical training programs. Adult vocational training was unknown in Denmark until 1985. The following are among the key problem areas in VET that Denmark's political system is currently addressing: (1) VET's failure to attract enough young people; (2) better provision for both academically weak and strong trainees; (3) transformation of adult and continuing training so that education becomes a natural and recurrent part of working life; (4) provision of greater incentives for adult participation in continuing and further training; and (5) internationalization of VET to respond to the increasing internationalization of business and industry. The following items are appended: lists of abbreviations and acronyms, important institutions/organizations, and 61 print and online sources; definitions of key terms; and overviews of recent initiatives. (Contains 42 tables.) (MN)

Reproductions supplied by EDRS are the best that can be made
from the original document.



Vocational education and training in Denmark

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

B. Brenna

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

BEST COPY AVAILABLE

CEDEFOP

Cover and layout: Segno Associati, Italy

Vocational education and training in Denmark

This monograph has been prepared by

Søren P. Nielsen and Pia Cort
The Danish Institute for Educational Training of Vocational Teachers

for Cedefop — European Centre for the Development of Vocational Training

Project coordinators: J. Michael Adams, Reinhard Nöbauer
under the responsibility of Stavros Stavrou, Deputy Director

Second edition, 1999

Published by:
Cedefop — European Centre for the Development of Vocational Training
Europe 123, GR-57001 Thessaloniki (Pylea)

Postal address:
PO Box 22427, GR-55102 Thessaloniki

Tel. (30) 310 490 111
Fax (30) 310 490 020
E-mail: info@cedefop.eu.int
Home page: www.cedefop.eu.int
Interactive web site: www.trainingvillage.gr

The Centre was established by Regulation (EEC) No 337/75 of the Council of the European Communities, last amended by Council Regulation (EC) No 251/95 of 6 February 1995 and Council Regulation (EC) No 354/95 of 20 February 1995.

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (http://europa.eu.int).

Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 2002

ISBN 92-828-2258-3

© European Centre for the Development of Vocational Training, 2002
All rights reserved.

Printed in Belgium

Cedefop introduction

Objective and target groups
The publication of this description of the vocational education and training system n Denmark is a further step towards updating and extending the series of descriptions of the (then 12) Member States published by Cedefop between 1993 and 1996. It now includes Austria, Finland and Sweden and countries covered by the European Economic Area (EEA) agreement. The objective is to present an overview of vocational education and training activities in Denmark so that it is easily understood by interested 'foreigners'. The target group includes those who may be esponsible for, and concerned with, VET policy issues, researchers in this field, directors of vocational training departments or institutions, and trainers and eachers, whether they work at EU or Member State level, or for a governmental or ocial partner organisation. Some may be using the text at their desks as a reference document. Others may be visiting the country concerned either on a study visit or to plan or execute a bi- or multilateral project, and are more likely to wish to read the document from beginning to end.

Content and structure
The volumes in this series set out to describe initial and continuing vocational education and training (VET). As far as initial VET is concerned this means including provision which is in some cases the responsibility of ministries for education and in others of ministries of employment or social affairs. As far as continuing VET is concerned, it requires coverage of provision for both the employed and unemployed, usually by a wide range of governmental bodies and ministries and by private and social partner organisations.

The structure of the report (see 'Contents') has been laid down in some detail by Cedefop, which also placed limits on how long it should be. The structure is, in general terms, similar to that adopted for the reports on the Member States ommissioned in 1992, but there have been some changes such as the addition of a chapter on what we have called 'qualitative aspects', including information on certification, training of trainers and guidance. We required the authors of all monographs including those updating the existing ones, to follow this amended tructure, so as to facilitate readers who wish to try to make comparisons between he systems.

Choice of author and consultation procedures
For this series Cedefop has tried to achieve a product which in some ways is mpossible. We wished to have a report written by an insider of the system concerned, but easily comprehensible to the outsider. It followed that the person/institution chosen, as an author is an insider, located in the country being described and, unless they choose not to do so, writing in their mother tongue. A further corollary of this was that Cedefop has tried to play the role of 'outsider' in discussions on the draft text, in order to draw authors' attention to places where he report was likely not to be easily understood by the public for which it is ntended.

Cedefop has also stipulated that the authors must carry out a consultation on the draft with the main parties involved in VET in their country. This has meant their ending the draft not only to the various public bodies responsible for organising he system and providing VET, but also to the principal representative bodies of the ocial partners. The assistance of the members of the Cedefop's Management Board n the country concerned has in particular been requested in this connection.

Publishing and updating

It is Cedefop's intention, as long as the necessary resources are available, to publish these monographs in paper form in their original language and in English, French and German. In occasional and exceptional circumstances it may publish some monographs in additional languages. Experience has, however, shown that the timescale involved in translating and publishing in hard-copy form, and the rate of change in the systems described, means that the reports can almost never be entirely up-to-date (*). Cedefop intends therefore also to use electronic means of publishing, including making summaries and updates of the texts available on Cedefop's Internet site (www.trainingvillage.gr).

Comments and feedback

As indicated above, Cedefop is conscious that in preparing this series it has had to make choices. We would very much appreciate having readers' views as to whether we have made the right ones concerning the scope, content and structure of the report. We would be pleased to have your comments by letter, fax or e-mail.

Vocational education and training in Denmark

Denmark invests heavily in education and training. It has a high-wage economy, with low unemployment. The range of opportunities available through the education and training systems, particularly for those threatened with exclusion, has been extended, but so has the pressure to participate in them. Unlike systems in other Nordic countries, the Danish one is highly differentiated in the upper secondary period. Apprenticeship, having experienced difficulties due to the lack of training places in companies in the late 1980s, has grown in recent years as employers have become increasingly aware of the need to invest in training. For adults also there has been a broadening and deepening of the education and training opportunities on offer. Although relatively small and homogeneous, the delivery of VET in Denmark is decentralised with a high level of operational and financial independence for each education and training institution. Particularly in the field of continuing training, competition between training providers is encouraged. Interest in the internationalisation of education and training is strong, with a unique piece of legislation encouraging apprentices to seek placements abroad. The role of the social partners is omnipresent, both on the formal and informal level.

Cedefop is very grateful to Søren Nielsen and Pia Cort of the Danish Institute for Educational Training of Vocational Teachers who prepared this monograph. They responded very positively to the comments and proposals for changes, which Cedefop made. We hope that together we have provided the reader with a useful tool.

Stavros Stavrou
Deputy Director

J. Michael Adams　Reinhard Nöbauer
Project coordinators

Thessaloniki, April 1999

(*) In this connection, attention is drawn to Annex 5 of the present publication.

Contents

Authors' preface 8

Chapter 1. Background information 11
1.1. Political and administrative structure 11
1.2. Population 13
1.3. Economy and labour market 16
  1.3.1. Economic policy 16
  1.3.4. Trends in the economy 16
1.4. Labour market 19
  1.4.1. Occupational structure 19
  1.4.2. The labour force and trends affecting it 20
  1.4.4. Unemployment 21
  1.4.9. Youth unemployment 22
  1.4.10. Long-term unemployment 23
1.5. Level of education in the population 24
  1.5.5. Male and female educational patterns 26

Chapter 2. Description of the education system and its development 29
2.1. Education policy since 1993 29
  2.1.1. Primary and lower secondary education 29
  2.1.2. Youth education and training 29
  2.1.5. Adult and continuing education 30
  2.1.6. Aims for the future 30
2.2. Description of the education system 33
  2.2.1. Primary and lower secondary school 33
  2.2.2. Transition from primary and lower secondary school to youth education 34
    2.2.2.1. Educational, vocational and labour market guidance 34
    2.2.2.6. Bridging 35
  2.2.3. Youth education 36
    2.2.3.5. Youth education/upper secondary (*gymnasium*) courses leading to academic qualifications 38
    2.2.3.6. Courses leading to vocational qualifications 39
    2.2.3.7. Individual courses 39
    2.2.3.8. State Education Fund 39
  2.2.4. Further education 39
    2.2.4.6. Shorter further education courses (vocational academy courses) 40
    2.2.4.7. Medium-length further education courses 40
    2.2.4.8. Long further education courses 40
  2.2.5. Adult and continuing education 41

Chapter 3. The vocational training system 43
3.1. Historical development of vocational training 43
  3.1.1. The period up to 1870 43
  3.1.5. The period 1870–1960 43
  3.1.12. The period 1960–87 45
  3.1.17. The period 1987–97 46
  3.1.22. Historical background to the adult vocational training (AMU) system 47
3.2. Vocational education and training schemes 50
  3.2.1. Introduction 50
  3.2.3. Aims of the vocational training schemes 50
  3.2.5. Continuous renewal of vocational training schemes 51
  3.2.13. Training structure and admission routes 53

- 3.2.22. Schoolteaching during vocational training 55
- 3.2.25. Syllabuses and examinations 57
- 3.2.31. The on-the-job training element of vocational training 58
- 3.2.35. Development in the training place situation 59
- 3.2.42. Technical vocational training — some examples 62
- 3.2.46. Commercial and clerical sector 63
- 3.2.52. Adult vocational education and training 65

3.3. Other vocational training courses 65
- 3.3.1. Agricultural training 65
- 3.3.5. Social welfare and healthcare training 66
- 3.3.15. Basic vocational training 68
- 3.3.19. Vocational education within the upper secondary school system 68
- 3.3.23. Access to further education 69
- 3.3.28. Training to combat youth unemployment 70
- 3.3.35. Training and job qualification programmes 71
- 3.3.40. Production schools 72

3.4. Vocationally-oriented adult training 73
- 3.4.1. Introduction 73
- 3.4.2. Basic, continuing and upgrading training 73
- 3.4.4. The adult and continuing education system 74
- 3.4.12. Adult vocational training courses 76
- 3.4.25. The AMU training programmes 79
- 3.4.27. AMU courses conferring vocational qualifications 79
- 3.4.30. Combined training programmes 81
- 3.4.32. Individual skills assessment 82
- 3.4.33. Enterprise-adapted training 82
- 3.4.34. Courses developed locally 82
- 3.4.35. Training provision for the unemployed 82
- 3.4.43. Job rotation 84
- 3.4.47. Vocationally oriented further education 85
- 3.4.51. Further technical training 86
- 3.4.53. Further commercial training 87
- 3.4.59. Further technical/commercial training 88
- 3.4.60. Open Education Act 88
- 3.4.66. Part-time qualifying courses 89

Chapter 4. Management and financing **91**

4.1. Management and administration 91
- 4.1.1. Management and administration of EUD and AMU training schemes 91
- 4.1.8. Advisory structure 93
- 4.1.16. Vocational schools 96
- 4.1.21. Management of the adult vocational training system 97
- 4.1.32. The overall decision-making system 100

4.2. Financing of vocational training 102
- 4.2.1. Public expenditure 102
- 4.2.3. Funding through taxation 104
- 4.2.12. Financing from collective funds 106
- 4.2.16. Financing of continuing vocational training 107
- 4.2.25. Grants from the European Social Fund 109

Chapter 5. Qualitative aspects 111
5.1. Qualifications and certification 111
5.2. Training for teachers in vocational education 112
5.3. Educational and vocational guidance 114

Chapter 6. Trends and perspectives 119
6.1. Introduction 119
6.2. Reform of technical vocational training 119
6.3. Lifelong learning 121
6.4. New parallel competence system for adult training schemes 122
6.5. Training institutions for the 21st century 122
6.6. Internationalisation and the significance of the EU 123

Annexes 127
Annex 1: Abbreviations and acronyms 129
Annex 2: Important institutions and organisations 132
Annex 3: Sources 134
Annex 4: Definition of some key terms 138
Annex 5: Recent initiatives 142

Authors' preface

This monograph in the Cedefop series on vocational training in the EU Member States was originally planned as an updated version of that published in the spring of 1995. However, structural changes which have taken place in vocational education and training in Denmark in the period since 1995 are so extensive that, in many areas, it has been necessary to rewrite the monograph completely.

While the text was being written, which took at least half a year, reform activity was further stepped up. Thus, a substantial restructuring of the Education Ministry took place with effect from 1 September 1998. The new organisational model is described as well as possible in Chapter 4. At the same time, a process of reform has been initiated in the field of technical vocational education and training. The main elements in this reform are described as well as can be achieved at this stage in Chapter 6.

The monograph is based on many sources. The publications of the Ministry of Education *Undervisningsministeriets Nyhedsbrev* (Newsletter of the Ministry of Education), the magazine *Uddannelse* (Education) and the statistical data issued by the Ministry provided a wealth of sound source material for an overview of a period in the history of Danish vocational education which has been marked by wide-ranging reforms in virtually all areas. The annual reports and statistical surveys of the National Labour Market Authority (*Arbejdsmarkedsstyrelsen*) were also very helpful.

This edition builds on the monograph of 1995, which gave a comprehensive description of vocational training provision in Denmark after the reforms. Although the many changes of substance in the various systems posed a number of difficulties in the work, it proved to be an interesting, albeit time-consuming task.

The monograph has been considerably improved by the comments and suggestions for changes presented during the discussion of the first draft. A number of constructive suggestions were incorporated into the text. Comments were received from the Ministry of Education, the Danish Employers' Confederation (DA), the Danish Confederation of Trade Unions (LO), the Danish unit of the Eurydice (education information network in the European Community), and selected experts in the field of vocational training who were able to comment on the monograph. I am also grateful to colleagues in the Danish Institute for Educational Training of Vocational Teachers (DEL) for their valuable critical comments and encouragement throughout the process.

It should be emphasised that responsibility for the final text rests with the authors. As we have already indicated, it amounts to an attempt to cover all the changes which have taken place in the Danish vocational education system in recent years at a single stroke. This monograph does not constitute an account authorised by either the Ministry of Labour or the Ministry of Education.

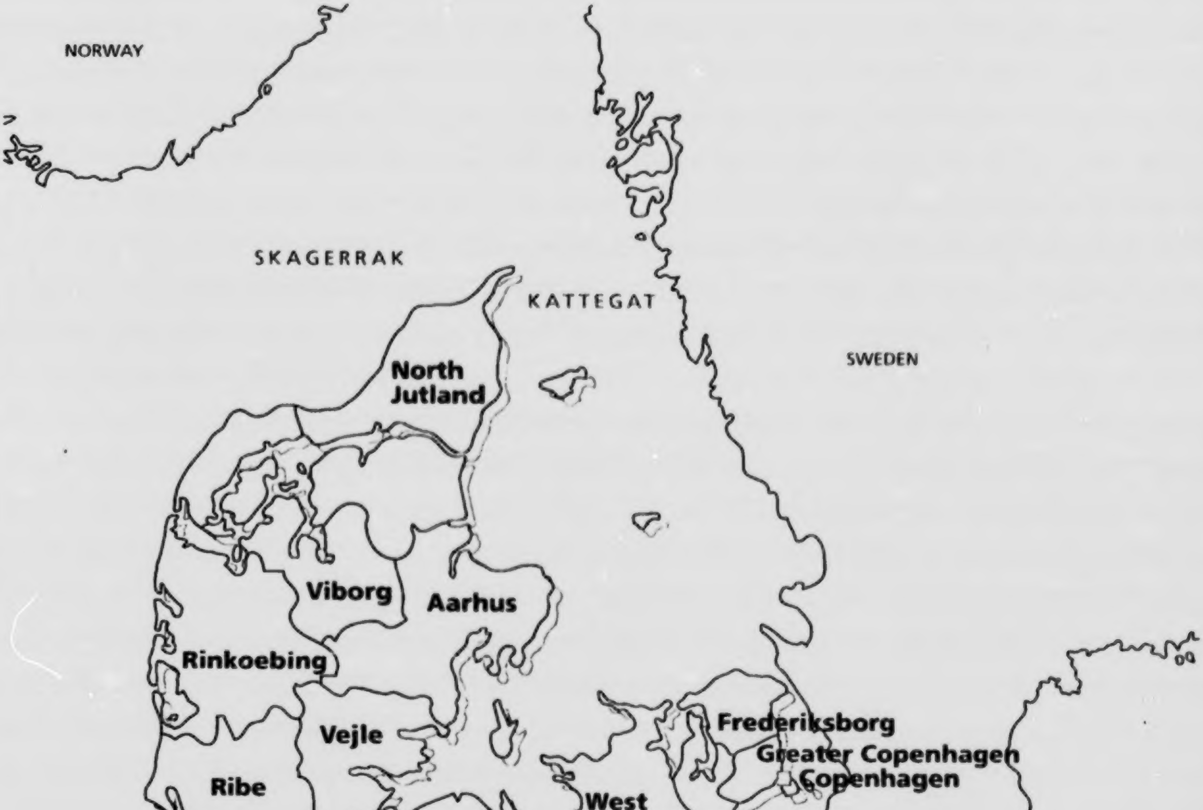
Finally, we would like to take this opportunity to thank our partners at Cedefop for the fruitful cooperation we have enjoyed in the course of the work on the monograph.

Søren P. Nielsen
Søren P. Nielsen
Pia Cort

Copenhagen, December 1998

Vocational education and training in Denmark

Denmark


NORWAY
SKAGERRAK
KATTEGAT
SWEDEN
North Jutland
Viborg
Aarhus
Rinkoebing
Vejle
Ribe
Funen
South Jutland
West Zealand
Storstroem
Frederiksborg
Greater Copenhagen
Copenhagen
Roskilde
Bornholm
GERMANY
County boundaries

BEST COPY AVAILABLE

Chapter 1
Background information

1.1. Political and administrative structure

1.1.1.

The Danish community of nations comprises Denmark, Greenland and the Faeroe Islands. Denmark has a total area of 43 000 km^2 and a population of approximately 5.3 million (1997). Greenland has an area of approximately 2 200 000 km^2 and a population of 55 971 (1997). The Faeroe Islands have an area of approximately 1 400 km^2 and a population of 43 784 (1997). Here and in subsequent chapters, only the situation in Denmark will be discussed.

1.1.2.

Denmark comprises the Jutland peninsula and three groups of islands:

- Sjælland (Zealand), Lolland and Falster;
- the Fyn (Funen) group of islands;
- Bornholm.

It is bounded by the sea to the west, north and east. The only land border stretches for about 68 km across southern Jutland and forms the frontier with the Federal Republic of Germany.

1.1.3.

Denmark is a constitutional monarchy with a representative democracy. The basic law, or constitution, was adopted in 1849 and was last amended in 1953. According to the basic law, the power of the State is divided among the legislature, the executive and the judiciary. Each of these three branches of government has its functions and they all to some extent monitor each other. Since 1953, Parliament has consisted of only one chamber, the *Folketing*, which has 179 members, including two from the Faeroes and two from Greenland. Elections are held by the proportional representation system, and the government is formed from the Folketing. The Folketing is elected for a four-year term. However, the government can dissolve the assembly at any time and announce new elections.

1.1.4.

No one political party has ever achieved a majority and been able to form a majority government. Since 1971, Denmark has mostly had minority governments, which have had to negotiate with one or more non-government parties in order to secure a majority for its proposals. Since 1993, Denmark has had a Social Democrat-led minority government.

1.1.5.

Denmark has three levels of government. The central administration, based in Copenhagen, consists of the various ministries, which may have one or more departments and comprise a number of institutions (directorates). The country is divided into 14 main local government units or counties (*amtskommuner*) and 275 municipalities (*primærkommuner*), almost half of which have fewer than 10 000 inhabitants. These administrative units can be considered small by international standards.

1.1.6.

All three administrative levels have a role in education policy. Vocational training and further education are under direct government control. The municipalities are responsible for the primary and lower secondary school system, while upper secondary education and courses for the higher preparatory examination (HF) are the province of the counties.

1.1.7.
Vocational education and training for young people aged 16 to 19 is the responsibility of the Ministry of Education, while the adult vocational training system (over 20) falls under the authority of the Ministry of Labour (see Section 4.1). However, the dividing line between the tasks of the Ministry of Labour and those of the Ministry of Education is not particularly sharp. One oddity is that the Ministry of Labour manages and pays for the continuing training of skilled workers, which takes place at schools providing basic vocational education for young people under the authority of the Ministry of Education.

1.1.8.
The active participation of the social partners is a central element in both systems. The active role of employers' and employees' representatives in the administration of the Danish vocational training system is a salient feature of the process, with regard to both the centralised or decentralised bodies which run the courses and the theoretical or practical elements in the vocational and continuing training systems. The central role of the social partners gives a guarantee that the content of individual courses meets the needs of the labour market and that qualifications obtained are immediately recognised in business and industry.

1.1.9.
Vocational education and training courses are offered within a uniform, nationwide system providing qualifications that, without exception, are valid throughout the country and are recognised by employers and trade unions alike. The same applies to the adult vocational training system ('labour market training courses' for persons aged over 20 — unskilled and skilled workers, technicians and work supervisors).

1.1.10.
Politically and administratively, an extensive process of modernisation has taken place in recent years in the Danish education system. New management philosophies and allocation mechanisms have been introduced, in which the key concepts are management by objectives within a given framework, decentralisation, increased play of market forces, stronger school management and freedom of educational choice in a coherent and open training system.

1.1.11.
With the education reforms, the rules of play between the ministries and schools/centres have been radically altered. In 1989, Parliament adopted two acts, the Vocational Training Act (*lov om erhvervsuddannelser*) and Vocational Schools Act (*lov om erhvervsskoler*), which together laid the groundwork for a comprehensive reform of vocational education (the 'EUD reform'). With the EUD reform, the management apparatus of the Ministry of Education was transformed from management through regulation to management by objectives within a given framework.

1.1.12.
The restructuring was implemented broadly speaking throughout the education system at its various levels, but its most radical effects were felt in the vocational training field, which is due to the fact that this system falls under direct government

control. The changes meant, amongst other things, that the 120 vocational schools, consisting of about 60 business schools and a corresponding number of technical schools, gained greater freedom to run their own operations on more user-oriented lines.

1.1.13.

The adult vocational training system (AMU) has also been energised by a switch to management by objectives. With the Adult Vocational Training Act (*lov om arbejdsmarkedsuddannelser*) of 1993 (amended in 1995), the 24 adult vocational training centres (AMU centres) gained greater freedom in financial management and educational planning.

1.1.14.

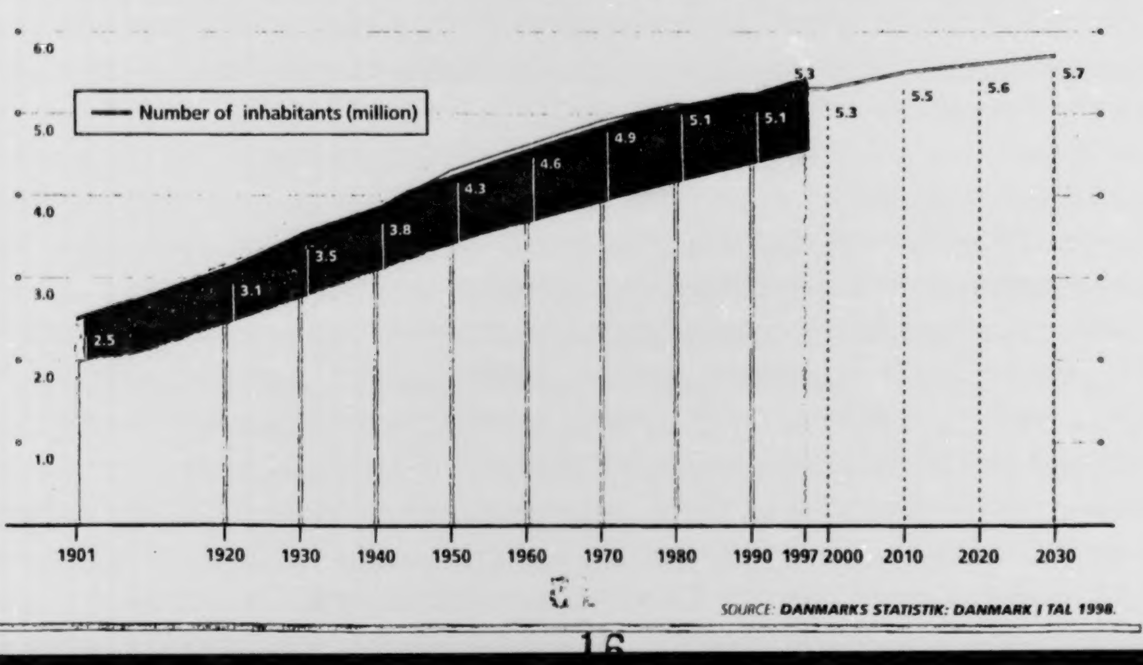
As a consequence of political and administrative decentralisation, the vocational schools and AMU centres have acquired considerably greater scope for devising individually tailored solutions and models. At the same time, however, it is a central objective of government, the social partners and other interested parties to retain the national coverage of qualifications in vocationally oriented youth and adult education. The occupational objectives are laid down, and there are fixed requirements for output tests. It is mainly in relation to content and organisational approach and in financial management that the schools have acquired greater freedom.

1.2. Population

1.2.1.

In the course of this century, the Danish population has doubled. Around 1900, Denmark had approximately 2.5 million inhabitants; in 1997 the figure was around 5.3 million. According to the population projections of the Danish statistical office (*Danmarks Statistik* — Statistic Denmark), the population is expected to show little growth in the coming years, rising to about 5.7 million in the year 2030.

Figure 1. **Danish population, 1900 – 2030, in million**



SOURCE: **DANMARKS STATISTIK: DANMARK I TAL 1998.**

1.2.2.
The live birth rate declined between 1966 and 1983. Since 1983, the birth rate has again been rising. However, not enough babies are being born to ensure that births will exceed deaths in the longer term. This means that the age structure of the population will tend towards fewer children and young people but more older people.

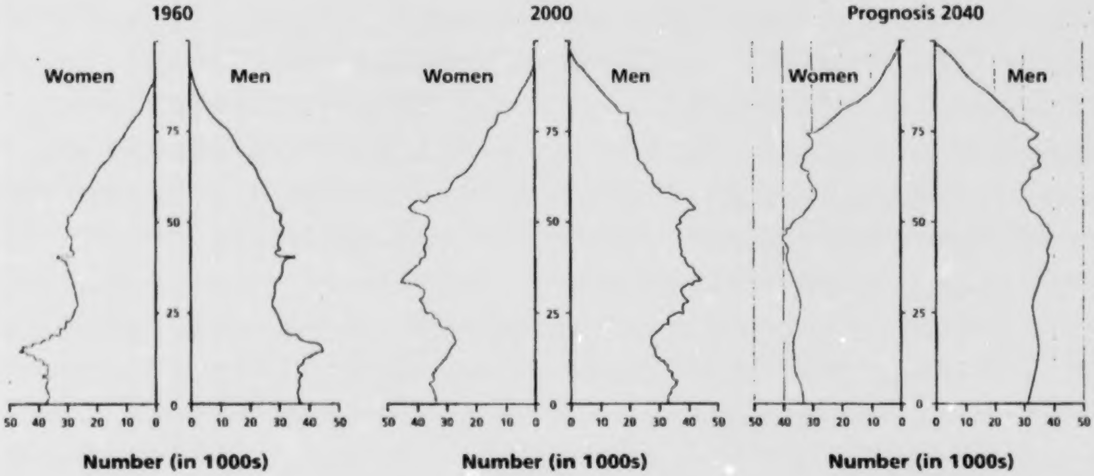
Table 1. **Number of live births, 1965 to 1996**

1965	1970	1975	1980	1985	1990	1995	1996
85 796	70 802	72 071	57 293	53 749	63 433	69 771	67 638

SOURCE: ***DANMARKS STATISTIK: DANMARK I TAL 1998.***

1.2.3.
Numbers in the older age range thus represent a rising proportion of the total population. In 1950, the number of persons aged 65 and over accounted for 9 % of the Danish population. By 1996, the proportion had risen to 15 %. It is in the over-80 age group that the proportion has risen most. This trend is expected to continue into the next century.

Figure 2. **Population, by age and sex, 1960, 2000 and 2040**



SOURCE: ***DANMARKS STATISTIK: SAMFUNDSSTATISTIK, 1998.***

The population projections of the Danish statistical office have changed radically over recent years. According to these, there will be considerably fewer young people in the labour force in 2010 than at present. The number of persons aged 20–35 will fall from the present figure of approximately 1 090 000 to about 890 000 in the year 2010. By 2025, however, the number of young people will have recovered to the same level as today. The change in the forecasts is due partly to rising fertility, but also to increased immigration into Denmark.

1.2.4.

Since the 1960s, there has been net immigration to Denmark. The proportion of foreign nationals in the population in 1997 was 4.5 %, compared with 1.9 % in 1980. Of these, two thirds come from Europe and North America. The foreign nationals are unevenly spread across the country, with 25 % resident in the municipalities of Copenhagen and Frederiksberg. Here they account for 10 % of the population.

Table 2. **Foreign nationals in Denmark, 1985 to 1997**

	1985	1990	1995	1997
Europe, total	78 700	95 012	116 013	147 478
Of whom: EU countries (1)	24 382	26 795	44 020	48 946
Former Yugoslavia	7 617	9 535	11 324	32 184
Turkey	18 806	27 929	34 967	36 835
Africa	4 470	6 146	13 481	19 168
North America, total	4 917	5 034	5 872	6 213
Of whom: United States	4 110	4 126	4 815	5 100
South and Central America	1 912	2 209	2 854	3 079
Asia	16 830	35 205	47 045	50 504
Oceania	527	618	960	1 038
Stateless/unknown	370	6 420	10 480	10 215
Total	**107 726**	**150 644**	**196 705**	**237 695**

---

(1) Included in EU countries: Portugal and Spain from 1 January 1986; Finland, Sweden and Austria from 1 January 1995.

SOURCE: DANMARKS STATISTIK: DANMARK I TAL 1998.

1.2.5.

The age composition among the foreign nationals differs from that of the population as a whole, in that there are relatively more children and young people and relatively fewer persons aged 65 and over. Thus, 31 % of foreign nationals are in the 0–19 age group, compared with 23 % of Danish citizens.

1.2.6.

The change in the age structure of the population is reflected on the labour market. In recent years there has thus been a trend towards increasing competition among Danish firms to attract young people. In addition, attention has focused politically on possibilities of retaining the older portion of the workforce on the labour market by such measures as more flexible transitional arrangements to pensionable status. The rising demand for younger workers on the labour market is expected to work to the advantage of young people from a non-Danish ethnic background.

1.3. Economy and labour market

Economic policy

1.3.1.

From 1963 to the end of the 1980s, Denmark had a persistent balance of payments deficit. Through the 1980s, the Danish Government pursued a rigorous financial policy and a policy of fixed exchange rates within the European Monetary System (EMS). The aim of the policy pursued was, first and foremost, to solve the balance of payments problems. The policy was successful in that the balance of payments improved and the inflation rate fell from 12.3 in 1980 to 1.2 in 1993. The adverse effect of this policy was high unemployment, which reached its peak in 1993 with 349 000 persons full-time unemployed (12.1 %).

1.3.2.

In 1993, the centre-right government stood down after 11 years in power. The change to a social democrat-led government meant a partial break with the economic policy pursued until then. The new government launched a moderately expansionary financial policy in order to bring momentum into the economy. The primary aim of monetary policy, however, is still to ensure a stable exchange rate vis-à-vis the core currencies in the EU — not least the German mark.

1.3.3.

In 1997, the government changed course in its financial policy. As a result of rising domestic demand and falling unemployment, with the concomitant danger of bottleneck problems and consequent wage pressure, the government tightened up its economic policy. It introduced a number of medium-term measures to control demand, including compulsory savings contributions to the supplementary earnings-related pension scheme (ATP) (1 % of pay) in 1998 and a series of unemployment policy measures: tighter rules on availability for work, work placement by the authorities at an earlier stage for persons aged 25–29, tighter rules on entitlement to full unemployment benefit for school-leavers, restriction of the training leave option for unemployed persons and abolition of the start-up allowance and business launch payment. This tighter financial policy is expected to remain in force over the next few years in order to avoid overheating of the economy. This should reduce the risk that the upturn will result in balance of payments problems as happened, for example, in the mid-1980s.

Trends in the economy

1.3.4.

In the mid-1990s, the Danish economy entered a period of stable long-term growth. In the past few years, growth has been driven mainly by domestic demand, but it is expected that in the coming years expansion in the Danish economy will be export-led. This is because of increasing growth abroad — especially in the EU — and the moderate tightening up of financial policy by the Danish Government in 1997 and again in 1998 to damp down domestic demand.

Table 3. **Key figures in the Danish economy**

	1993	**1994**	**1995**	**1996**	**1997**	**1998(*)**	**1999(*)**
Percentage increase over the previous year:							
Real GDP	0.8	5.8	3.2	3.2	3.3	2.6	1.7
Total real GDP in the OECD (¹)	1.2	2.9	2.1	2.8	3.1	2.4	2.1
Labour market:							
Labour force (1 000 persons)	2 880	2 864	2 843	2 833	2 866	2 880	2 886
Employment (1 000 persons)	2 531	2 521	2 555	2 588	2 646	2 695	2 711
Of whom: in business and industry	1 759	1 750	1 784	1 802	1 843	1 877	1 887
in public services	771	770	771	786	803	818	824
Percentage increase in total employment	– 1.5	– 0.4	1.4	1.3	2.3	1.8	0.6
Unemployment (1 000 persons)	349	343	288	246	220	185	175
Early retirement payment recipients, etc. (²)	113	119	138	167	171	179	184
Persons on training leave	5	51	82	63	47	38	34
Unemployed as % of labour force	12.1	12.0	10.1	8.7	7.7	6.4	6.1
Unemployed as % of labour force, per EU def. (³)	10.1	8.2	7.2	6.9	6.1	5.0	4.9
Balance of payments and foreign debt:							
Balance of goods and services, DKK bn	61.3	51.6	40.5	48.0	37.6	26.9	35.1
Balance of payments on current account, total (DKK bn)	30.4	17.0	10.2	16.4	6.4	– 7.0	0.0
Balance of payments surplus, as % of GDP	3.4	1.8	1.1	1.7	0.6	– 0.6	0.0
Net foreign debt, end of year, – DKK bn	291.0	259.0	266.0	253.0	268.0	275.0	275.0
– DKK bn as % of GDP for year	32.3	26.8	26.2	23.7	23.9	23.4	22.4
Public finances:							
Balance of total public budgets, – DKK bn	– 24.8	– 25.2	– 22.3	– 9.4	2.6	11.3	27.9
– DKK bn as % of GDP	– 2.8	– 2.6	– 2.2	– 0.9	0.2	1.0	2.3

(*) Forecast

(¹) Excluding Mexico and Turkey.

(²) Including recipients of transitional payments and partial early retirement payments.

(³) The EU definition of unemployment differs from that of Denmark. Amongst other things, the EU imposes a number of requirements regarding job-seeking activity and availability for work. On the other hand, persons seeking work are included even if they do not receive unemployment benefit or cash assistance.

SOURCE: ***DANISH MINISTRY OF ECONOMIC AFFAIRS: NØGLETAL, DECEMBER 1998.***

1.3.5.

The Danish Council of Economic Advisers considers it likely that the upturn in the Danish economy will continue over the next few years. According to their forecasts, growth in 1998 and 1999 will be 2.75 and 2.5 % respectively. It is expected that inflation will be held down.

1.3.6.

The strong growth in domestic demand in 1997 gave rise to a significant increase in imports. At the same time, growth abroad and the fall in effective exchange rates for the Danish crown gave a certain boost to exports, but overall the balance of trade in goods and services worsened. It is thus not expected that the surplus in the balance of payments on current account can be sustained in 1998. The expected damping down of domestic demand in 1999 and 2000 will lead to falling growth in imports. Growth abroad will help to keep exports buoyant in the next few years, despite a reduction in competitiveness due to higher pay increases than abroad.

1.3.7.

The steep rise in imports means that in 1998 there will be a balance of payments deficit of DKK 7 billion. However, it is expected that the boost in exports combined with more moderate import growth will mean an improvement in the balance of payments in 1999. The Council of Economic Advisers and the OECD, however, expect a deficit of DKK 10 billion in 1998 and DKK 12 billion in 1999.

1.3.8.

In order to damp down economic activity, several temporary measures were planned and implemented in the course of 1997, including an extraordinary payment to the Supplementary earnings-related pension scheme (ATP) in 1998. The 'temporary' ATP saving contribution was made permanent in June 1998 and, at the same time, the basis for subsequent disbursements was changed from the principle of payments made into the scheme to one based on 'solidarity'.

Table 4. **Surplus in the balance of payments on current account, DKK million**

	1980	1985	1990	1995	1996	1997	1998 (*)	1999 (*)
Current account total	– 13 400	– 28 833	8 175	10 247	16 400	6 400	– 7 000	0

(*) Forecast.
EUR 1 = DKK 7.4480

SOURCE: DANMARKS STATISTIK: DANMARK I TAL 1998 AND KEY FIGURES FROM THE MINISTRY OF ECONOMIC AFFAIRS, DECEMBER 1998.

1.3.9.

The upturn of recent years is reflected in public finances by reduced growth in public expenditure, especially for income transfers, and reasonable increases in public revenue. The result is that the balance in public finances in 1997 was positive after eight years in deficit. The deficit of DKK 24.8 billion in 1993 was transformed into a surplus of DKK 2.6 billion in 1997. From 1996 to 1997, the budget improved by DKK 12 billion. The surplus is expected to rise to DKK 11.3 billion in 1998. Given the financial policy preconditions in place, it is expected that the surplus can be maintained over the next few years and that it will be around DKK 27 billion in 1999.

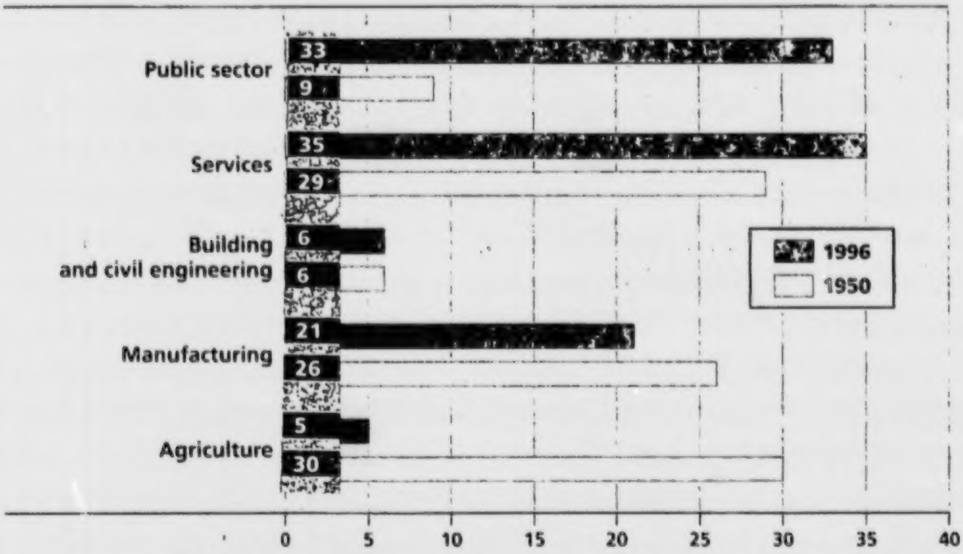
1.3.10.
With the surplus in public finances, public debt has been reduced. The government's declared aim for 'Denmark as a pioneering nation' is a reduction in public debt to 40 % of GDP within the next eight years. In 1996, public debt stood at about 70 % of GDP.

1.4. Labour market

Occupational structure

1.4.1.
In this century, major changes have taken place in the occupational structure in Denmark. The figure below shows the breakdown of the labour force by employment sectors in 1950 and 1996.

Figure 3. Employees grouped according to sector, 1950 and 1996 (in %)



SOURCE: **DANMARKS STATISTIK: LEVEVILKÅR I DANMARK 1997, P. 175.**

The most dramatic change is the reduction in numbers employed in agriculture. Whereas in 1950 30 % of the labour force was employed in agriculture, this proportion had fallen to 5 % in 1996. In the same period, the number of persons employed in the public sector has more than trebled. Similarly, it may be noted that employment in industry and craft activities (manufacturing) declined from 1950 to 1995, while that in trade, transport and the services expanded.

BEST COPY AVAILABLE

Table 5. Employment by main occupational group, 1970, 1980 and 1996

	1970	1980	1996
Agriculture, etc.	259 796	192 400	119 300
Raw materials extraction	2 346	2 200	2 300
Manufacturing	569 872	489 800	486 100
Electricity, gas and water supply, etc.	13 674	15 000	16 000
Building and civil engineering	220 598	189 100	167 900
Commercial services	787 738	833 200	967 800
Public services, etc.	430 417	720 200	786 200
Employees, total	**2 284 441**	**2 441 900**	**2 545 500**

SOURCE: **DANMARKS STATISTIK: SAMFUNDSSTATISTIK 1997, P. 47.**

The labour force and trends affecting it

1.4.2.

Since the end of the 1950s, the labour force has increased by approximately 700 000 persons, exceeding the growth in population over the same period by 100 000. Almost all the increase is accounted for by women. The difference in rates of economic activity between women and men has thus been steadily decreasing, although the increase in the activity rate of women levelled off at the start of the 1990s. The Scandinavian countries still have a relatively higher rate of activity among women than the other European countries, the USA and Japan.

Table 6. Employment rates, by sex, in selected countries, 1973 to 1996

	Men				Women			
	1973	1983	1990	1996	1973	1983	1990	1996
US	86.2	84.6	83.8	87.0	51.1	61.8	68.2	72.0
Japan	90.1	89.1	87.8	91.6	54.0	57.2	60.4	62.8
(West) Germany	89.6	82.6	81.2	79.9	50.3	52.5	57.0	60.4
United Kingdom	93.0	87.5	87.1	86.1	53.2	57.2	67.4	68.4
France	85.2	78.4	75.2	75.0	50.1	54.4	56.6	60.7
Italy	85.1	80.7	78.1	73.5	33.7	40.3	44.5	43.7
Netherlands	85.6	77.3	79.6	80.9	29.2	40.3	53.0	59.8
Norway	86.5	87.2	84.5	86.1	50.6	65.5	71.2	72.3
Sweden	88.1	85.9	85.3	81.6	62.6	76.6	81.1	76.3
Denmark	**89.6**	**87.5**	**89.6**	**86.2**	**61.9**	**74.2**	**78.4**	**74.0**

NB: The rate of activity is calculated here as the labour force divided by the population of working age — here taken as the 15-64 age group.

SOURCE: **OECD: EMPLOYMENT OUTLOOK, 1992 AND 1997.**

1.4.3.

In 1997, the labour force — defined as all persons aged between 16 and 66 with access to the labour market — numbered approximately 2.9 million. According to a survey by the Ministry of Economic Affairs in December 1997, the labour force is expected to remain at this level over the next few years (see Table 3). As has been pointed out, however, the age composition of the labour force is expected to change in the direction of fewer young people and more older workers.

Unemployment

1.4.4.

In the period from the end of the 1950s through to 1973, unemployment in Denmark was extremely low, i.e. less than 2–3 % as an annual average. With the oil crisis in the 1970s, unemployment rose dramatically and was a salient feature of the Danish social picture throughout the 1980s and into the 1990s. Overall, unemployment showed a rising trend from 1974 to 1983. After that there was a fall, quickly followed by a renewed increase which lasted until 1993. Since 1993, unemployment has fallen appreciably.

Table 7. **Registered unemployment, 1981 to 1996 (in 1000s)**

	1981	1985	1990	1993	1994	1995	1996
Labour force	2 745	2 833	2 907	2 880	2 864	2 843	2 833
Employed	2 551	2 598	2 673	2 531	2 521	2 555	2 588
Unemployed	193	235	233	349	343	288	246

SOURCE: DANMARKS STATISTIK: SAMFUNDSSTATISTIK 1997 AND MINISTRY OF ECONOMIC AFFAIRS 1998.

1.4.5.

Average unemployment in 1996 was thus 8.7 % of the labour force, corresponding to 246 000 persons in full-time unemployment. About 27 %, corresponding to approximately 756 000 persons, had however been temporarily unemployed at one time or another during 1996. The average period of unemployment was 3.9 months. In 1997, average unemployment fell to 7.7 % of the labour force, a reduction that is expected to continue in the next few years (see Table 3).

1.4.6.

Nevertheless, overall unemployment is still high and unevenly distributed. Unemployment among unskilled workers is on average far higher than among those with vocational qualifications. Unemployment among women is generally somewhat higher than among men: in 1997, 8.0 % compared with 6.2 % for men; foreign nationals run a greater risk of becoming unemployed than Danes in general.

1.4.7.

The Council of Economic Advisers expects an increase in employment of approximately 50 000 persons in 1997, resulting from an expansion in both the public and the private sector. In the public sector, employment will grow by approximately 23 000 persons. This increase will be due in the first instance to an expansion in local government employment. In the private sector, it is jobs in the service sector that will power the upturn. In this sector, employment in 1997 is set to rise by approximately 20 000 persons. This expansion of jobs in service industries had also been seen in 1995 and 1996. The growth in employment in the service industries from 1970 to 1996 was 82.7 % in the public sector and 22.9 % in the private sector. In the same period, the number of persons employed in agriculture fell by 54.1 %.

1.4.8.

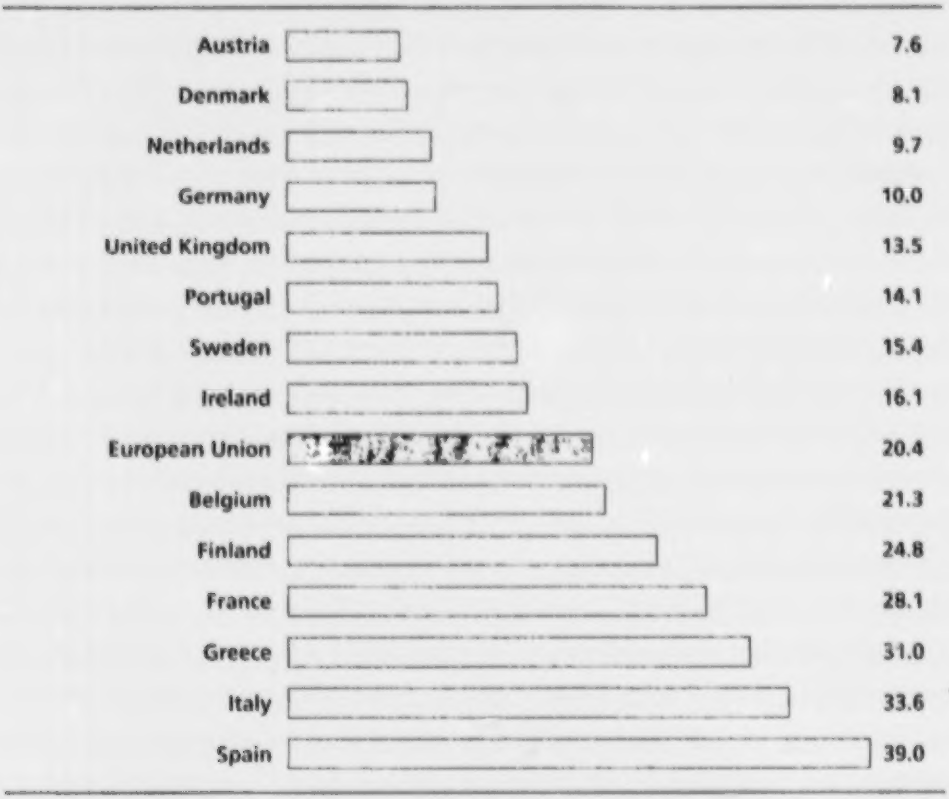
The dramatic fall in unemployment can be explained by a number of factors. To begin with, the Danish Government pursued an expansionary financial policy up to 1997. Secondly, the rise in wages has been moderate in Denmark. A third explanation is attributable to the many changes in labour market policy. Amongst other things, in the course of the 1990s the government introduced measures to stimulate an early return of unemployed persons to gainful activity and to provide for the use of periods out of work for retraining and continuing training. According to the European Commission, only 10 % of those out of work in the EU as a whole take part in education and training. In Denmark, the figure is 31 % and in Finland and the Netherlands 28 %. Other factors to be taken into account are improved international competitiveness for Danish firms, which has led to increased demand for labour, and various retirement schemes (for example, the early retirement allowance) on the Danish labour market.

Youth unemployment

1.4.9.

From 1996 to 1997, youth unemployment in Denmark fell from 10.6 to 8.1 %. Denmark is thus one of the European countries with the lowest youth unemployment. According to the OECD, this excellent position is attributable in particular to Denmark's apprenticeship system, which provides for a smooth transition from school to the labour market. Besides, the government has made a targeted effort to reduce youth unemployment. In 1995, for example, Parliament decided that young people under 25 should have both the right and the obligation to start a training course after a maximum of six months' unemployment (see Sections 2.1.4 and 3.3.28).

Figure 4. **Youth (aged between 15 and 24) unemployment in Europe, 1997 (in %)**



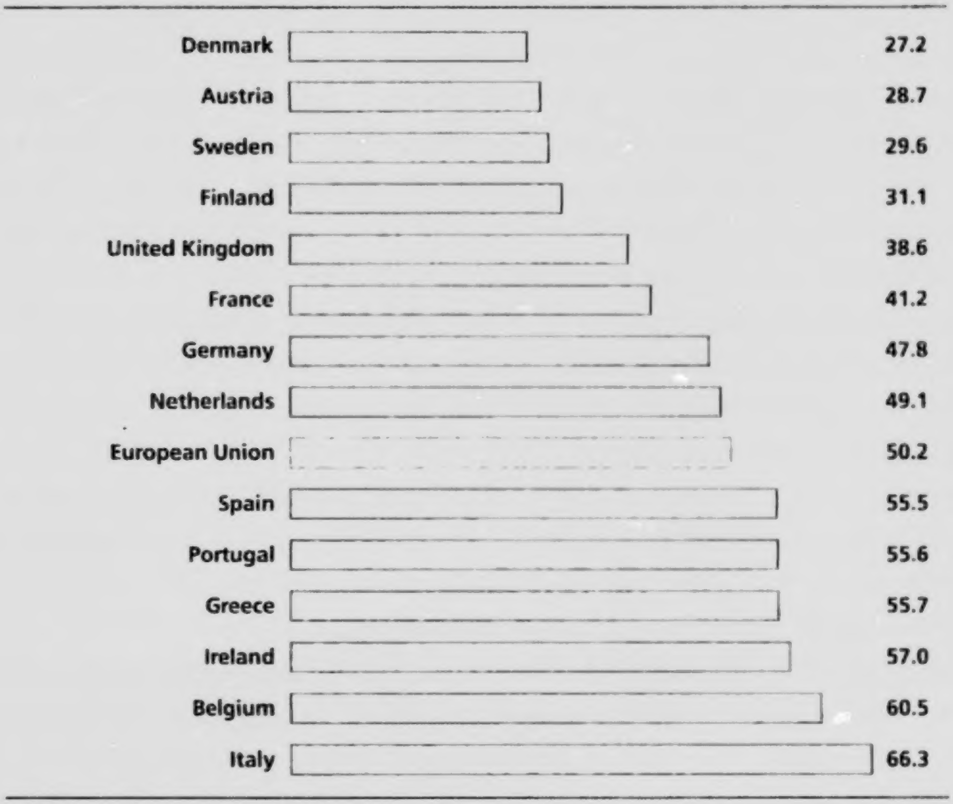
SOURCE: **OECD: EMPLOYMENT OUTLOOK, 1998.**

Long-term unemployment

1.4.10.

In 1996, there were approximately 85 000 long-term unemployed in Denmark. They represent approximately 11 % of the unemployed but bear around a third of the total burden of unemployment. Long-term unemployment in Denmark, however, is expected to follow the trend in average unemployment, hence to fall, in the coming years. A falling trend in unemployment only starts to have an effect among the long-term unemployed after a certain time-lag.

Figure 5. **Long-term unemployment (*) in Europe, as % of total unemployment, 1997**



(*) Unemployment lasting 12 months or longer.

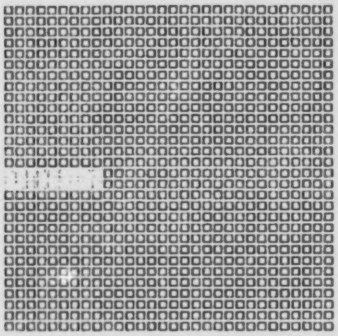
SOURCE: **OECD: EMPLOYMENT OUTLOOK, 1998.**

1.5. Level of education in the population

1.5.1.

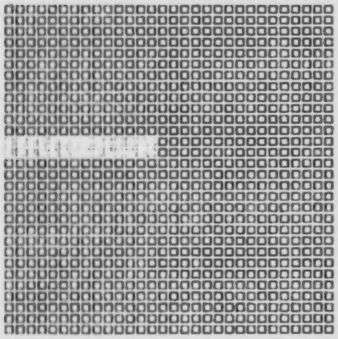
The level of education has risen appreciably since the Second World War, and a steadily increasing number of Danes now have some form of vocational qualification. The proportion of persons aged 30–69 with a vocational qualification thus rose from 1985 to 1995. In 1995, 56 % had such a qualification, 36 % having an occupational qualification and 20 % a further education qualification; of these, 5 % had undergone extended further education. Since 1985, the proportions of persons with occupational and further education qualifications have both risen by six percentage points.

Figure 6. **Educational level of persons aged 30–69, on 1 January 1985 and 1995**



1985

Educational level of persons aged 30–69	
☐ **Basic schooling**	**53 %**
⬚ **Academic education**	**2 %**
☐ **Vocational education**	**45 %**



1995

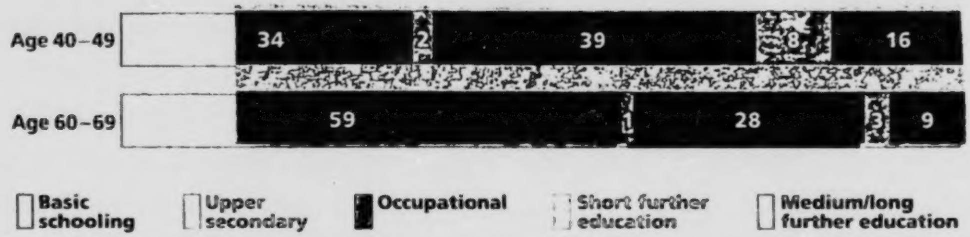
Educational level of persons aged 30–69	
☐ **Basic schooling**	**42 %**
⬚ **Academic education**	**3 %**
☐ **Vocational education**	**56 %**

SOURCE: ***DANMARKS STATISTIK: LEVEVILKÅR I DANMARK 1997, P. 130.***

1.5.2.

A comparison — carried out by Danmarks Statistik — between two generations in the age groups 40–49 and 60–69, respectively, at 1 January 1995 shows that far more persons in the 40–49 age group have a vocational qualification (see Figure 7). The comparison also shows that most people in both generations had an occupational qualification. Among the 60–69 year-olds, 40 % had a vocational qualification in 1995. Among them, most (28 %) had an occupational qualification and only 12 % a further education qualification. Among the 40–49 year-olds, 63 % had a vocational qualification; 39 % of these had an occupational qualification and 24 % had undergone further education.

Figure 7. Educational level, on 1 January 1995, of persons born in the years 1926–35 and 1946–55



SOURCE: DANMARKS STATISTIK: LEVEVILKÅR I DANMARK 1997, P. 128.

1.5.3.

The period of schooling has also become longer, partly because more pupils go on to upper secondary education and partly because the period of basic schooling has been extended. The difference between the sexes in basic educational proficiency has largely disappeared, while at the same time the gap has narrowed considerably as far as vocational qualifications are concerned.

1.5.4.

An ever-increasing proportion of young people follows some form of vocational education. From 1982 to 1995, the proportion rose from 60 to 72 %. Although there has been considerable progress in recent years, rates of education in Denmark are still not on the same level as in some of the countries with which Denmark is traditionally compared. For example, by comparison with Germany, Sweden and the USA, a smaller proportion of 25–34 year-olds follows youth training courses. The same applies to the proportion having had some form of further education. A third of young people were not in education or had no form of vocational qualification 10 years after leaving primary and lower secondary education. This 'residual' group has diminished somewhat over the past few years (see Section 2.2.3.4).

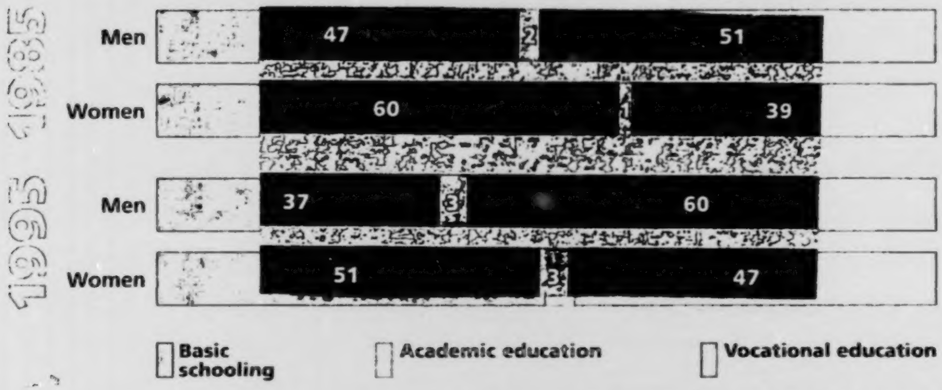
Male and female educational patterns

1.5.5.

In 1995, there were still sharp contrasts between male and female educational patterns, with regard to both level and subjects — although the differences had lessened between 1985 and 1995. There was still a predominance of men with occupational or long further education, while there was a predominance of women who had had further education of short and medium duration (e.g. market economist courses, computer studies, nursing, childcare (*pædagog*), schoolteaching).

BEST COPY AVAILABLE

Figure 8. Differences in educational levels, by sex, persons aged 30-69, 1985 and 1995



SOURCE DANMARKS STATISTIK: LEVEVILKÅR I DANMARK 1997, P. 130.

1.5.6.

As has been mentioned, there is a predominance of men on occupational training courses (in 1997, 56 % male students). There are, however, considerable differences from course to course. Traditionally, there has been a majority of women on commercial studies courses, while men have dominated courses in technical studies. In 1997, 63 % of students on commercial studies courses were women, and 75 % of students on technical courses were men. The same trend was in evidence in courses leading to the higher commercial examination (*Højere Handelseksamen — HHX*) and higher technical examination (*Højere Teknisk Eksamen — HTX*), in which women accounted for 54 and 14 %, respectively.

1.5.7.

It is, however, possible to discern a change in women's choice of subjects. A study by *Danmarks Statistik* shows that the proportion of female students on food technology, agricultural and graphic studies courses increased between 1985 and 1995. The same applied with regard to the shorter further education courses, in which the academic economics course was one of the factors to alter the picture. Similarly, there was an increase in the proportion of female construction engineers. In the case of medium-length technical courses, the proportion of women increased in particular on the business studies and engineering courses. Finally, the proportion of female students on long further education courses also increased. The changes were greatest, however, in agriculture and the social sciences (e.g. lawyers, economists and doctors).

BEST COPY AVAILABLE

Chapter 2 Description of the education system and its development

2.1. Education policy since 1993

Since 1993, the Danish Government has chosen to focus on three priorities in its education policy. Firstly, a primary and lower secondary education reform aimed at ensuring that all children get an opportunity for learning and personal development consistent with their own capabilities. Secondly, to ensure that training opportunities are available to all young people, and thirdly to increase provision in the field of adult and continuing education.

Primary and lower secondary education

2.1.1.
In August 1993, a new Primary and Lower Secondary Education Act (*folkeskolelov*) was adopted. Its main innovations were:

- higher priority for science subjects;
- requirements for differentiation in teaching;
- internal assessment as a basis for the planning of teaching;
- interdisciplinary teaching and use of project work as a teaching method;
- teacher cooperation, with the class teacher as *primus inter pares*;
- greater freedom for the individual school with regard to the organisation and planning of teaching.

Youth education and training

2.1.2.
Youth education was assigned high priority as an area of activity in education policy. The government has launched a large number of initiatives with the aim of ensuring that the largest possible number of young people receive youth education and training. In 1993, the Minister for Education launched an action plan, 'Education for all' (*Uddannelse til Alle — UTA*). The background to this was the high drop-out rate. At least a quarter of any class-year of young people did not receive any youth education and a third did not obtain a vocational qualification.

2.1.3.
The aim of the action plan is to ensure that all young people not only begin but also complete a youth education course. The plan provides for a number of initiatives, concentrating in particular on measures to boost the provision of guidance for vulnerable young people and to create alternative training programmes to catch young people before they drop out.

2.1.4.
Among the series of educational initiatives launched by the government since 1993, special attention should be drawn to the following.

Bridging programmes (*brobygningsforløb*) providing a transition to youth training are offered to all young people under the age of 19 who have completed the ninth class of primary and lower secondary school but are undecided as to the choice of a youth training course. Bridging programmes are a combination of educational guidance and teaching, in which the young people are given an opportunity to try out certain training options in practice before they take their decision. A bridging programme can last up to one year.

Free youth education (*frie ungdomsuddannelse*) is a two-year general education course not leading to a formal qualification; each individual specifies the content of the course according to his or her wishes and needs. The course should consist of at least three parts — including a minimum of 40 weeks at school. The constituent parts may be made up of parts of existing courses, periods of attendance at a *folkehøjskole* (people's high school), voluntary work, project work, stays abroad, etc. After completion a certificate is awarded.

Basic vocational training (*erhvervsgrunduddannelse — EGU*) is another alternative. The aim is, by a combination of education and practical work, to motivate less academically inclined young people to take a training course or to enhance their prospects for inclusion in the labour market. The course lasts two years and an individual training plan is worked out which is carefully monitored by the guidance system.

Special training provision (*særlig uddannelsesindsats*) for young unemployed persons under 25. From 1996, all young people have both a right and an obligation to take a training course after a maximum of six months' unemployment. The choice of training scheme is agreed with the Public Employment Service (*Arbejdsformidlingen — AF*) or the municipality.

Adult and continuing education

2.1.5.

In the field of adult and continuing education, the focus is on the concept of lifelong learning. Thus the Ministry of Education has launched a 10-point plan for recurrent training. The key principles of this plan (see Section 6.3) are:

- free admission to training courses, so that institutions will accept all participants who meet the entrance requirements;
- provision determined by demand; and
- user payment.

Aims for the future

2.1.6.

Education is a high priority in Denmark, which is one of the countries of the world that devotes most resources to education (see Section 4.2.1). Considerable effort will continue to be devoted to the education field in the coming years. In the publication *Danmark som foregangsland* (Denmark as a pioneer country), the Danish Government has described its aims for the Danish education system through to the year 2005. The overriding aim is that the Danish education system should be among the 5–10 best in the world, in terms of both quality and effectiveness. The other aims include that:

- the greatest possible number should receive education leading to a vocational qualification;
- 90–95 % of young people in a class-year should, as a minimum, go on to youth education;
- 50 % of a class-year should undergo further education;
- recurrent training should become a natural part of life and participation in society;

Figure 9. **Overview of major reforms in the Danish education system during the 1990s**

Primary and lower secondary education

1990 ↓	New provisions for the management of schools, amongst other things through boards of governors
1993 ↓	The primary and lower secondary education reform. Offers further possibilities for the flexible organisation and planning of teaching
1997	New teacher training. The number of main subject areas was increased from two to four

Youth education and training

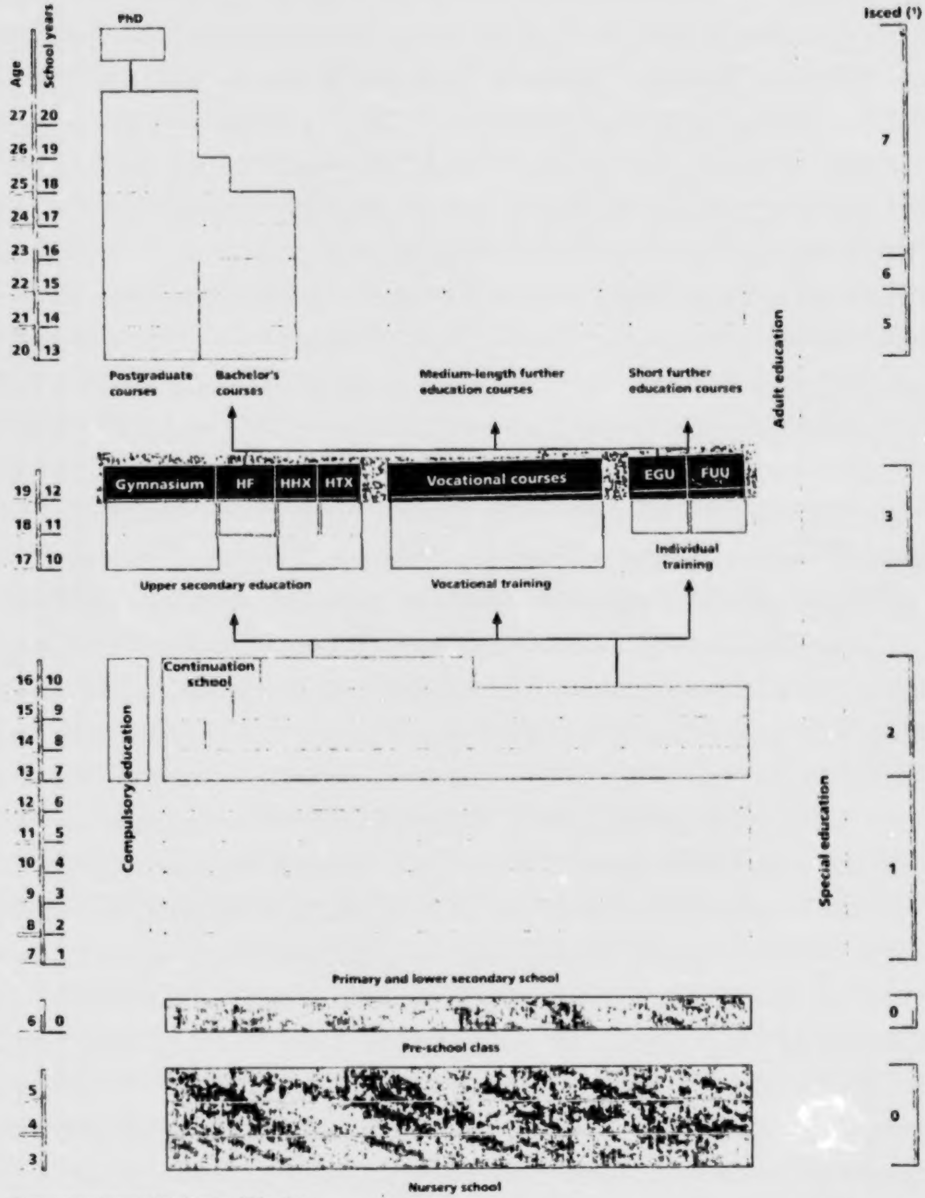
1988 ↓	The *grengymnasium* (upper secondary school for a specific branch of studies) was replaced by the *valggymnasium* (option-based upper secondary school)
1991	Reform of vocational training and management of the vocational schools Apprentice training and basic vocational education (*erhvervsfaglige grunduddannelser — EFG*) were combined into a new structure The schools switched to management by objectives, and the grants system went over to the 'taxi-meter' principle
1991	Introduction of upper secondary school management boards. Reform of the higher preparatory examination (*Højere Forberedelseseksamen — HF*) system with, amongst other things, a strengthening of the natural sciences dimension
1991–1992	Reform of social welfare and healthcare training (*SOSU*) and agricultural training
1993–1994	Establishment of basic vocational training (*erhvervsgrunduddannelse — EGU*)
1994	Establishment of free youth education (*frie ungdomsuddannelse — FUU*)
1995	Reorganisation of the vocational upper secondary school on the basis of three-year courses
1996	Establishment of basic training in childcare (*pædagogisk grunduddannelse — PGU*) as part of social welfare and healthcare training
1996	Reform of commercial vocational training

Further education courses

1992	Multiannual agreements for further education. Amongst other things, a uniform study structure was introduced for university courses with self-contained three-year bachelor's courses, two-year postgraduate courses and three-year PhD courses
1993 ↓	A new Universities Act with, amongst other things, a new management structure at universities. Management powers were more clearly specified, and the number of governing bodies was reduced. At the same time the funding was switched to the 'taxi-meter' principle
1997	Reform of short further education courses

SOURCE: **AUTHORS.**

Figure 10. Overview of the Danish education system


PhD
Age
School years
27 20
26 19
25 18
24 17
23 16
22 15
21 14
20 13
Postgraduate courses
Bachelor's courses
Medium-length further education courses
Short further education courses
Adult education
Isced (1)
7
6
5
Gymnasium
HF
HHX
HTX
Vocational courses
EGU
FUU
19 12
18 11
17 10
3
Upper secondary education
Vocational training
Individual training
Continuation school
16 10
15 9
14 8
13 7
12 6
11 5
10 4
9 3
8 2
7 1
Compulsory education
2
Special education
1
Primary and lower secondary school
6 0
0
Pre-school class
5
4
3
0
Nursery school

(1) International Standard Classification of Education.

SOURCE: ***MINISTRY OF EDUCATION: TAL DER TALER. UDDANNELSESNØGLETAL 1996.***

- the training system should be organised flexibly and should develop continuously in step with society, in order that it can continue to provide the vocational and personal qualifications needed in a modern technological society based on democratic principles.

A large number of policy initiatives have already been taken to achieve these aims by the year 2005. For further details, see Section 2.1.4 and Chapter 6.

2.2. Description of the education system

2.2.1. Primary and lower secondary school

2.2.1.1.

In Denmark it is education, not school attendance, that is compulsory. Compulsory education becomes effective in the year the child reaches the age of seven and lasts for nine years. Parents can comply with the education obligation by sending the child to:

- the local authority primary and lower secondary school;
- a private school; or
- by teaching the child at home.

2.2.1.2.

Primary and lower secondary school is a nine-year unitary establishment, which means that the pupils in a given intake-year pass through the entire educational sequence from the first to the ninth class. In addition they are usually taught by the same teachers throughout the process. Apart from the nine years' compulsory education, a voluntary pre-school class and an optional 10th class are also available. About 98 % of all the Danish children attend the pre-school class, and in 1998, 70 % opted to take the 10th class. The Danish basic law guarantees that education is free of charge.

2.2.1.3.

About 88 % of all Danish children complete their basic schooling at the local authority primary and lower secondary school. It is the local government administration which allocates resources for these schools and has overall responsibility for them. The educational aims and core knowledge and skills in individual subjects and the compulsory subjects to be taught are laid down by the Ministry of Education and are mandatory for the schools, as are guideline curricula; the final mandatory curricula are laid down by the individual municipalities.

2.2.1.4.

By law, the maximum class size is 28 pupils. In 1997, the average class size was 18.4.

2.2.1.5.

The nine years of compulsory education can also be taken at a private school. About 12 % go to private school, and the trend has been rising through the 1990s. Education at private schools is financed partly by State subsidies (about 80 % of total expenditure) and partly by payment of fees.

2.2.1.6.

At the 8th–10th class stage, pupils can opt to carry on their basic education at continuation schools. Continuation schools are boarding schools. In 1995, 18 000 young people chose to attend continuation schools. There are 228 such schools in Denmark.

2.2.1.7.

The number of bilingual pupils at the primary and lower secondary schools is rising. In 1994, 6 % of pupils in primary schools and private schools respectively were bilingual. The largest group is from Turkey, but there are also many pupils from Palestine, the Lebanon and former Yugoslavia. It is expected that the total number of pupils whose mother tongue is not Danish at primary and lower secondary schools will rise to approximately 9 % in the year 2000.

2.2.1.8.

Bilingual pupils are often concentrated at schools in socially disadvantaged areas of large conurbations. Certain schools have up to 90 % bilingual pupils. It is a special concern of Danish education policy to integrate this group into Danish society. Since one of the essential preconditions for successful integration is mastery of the Danish language, instruction in Danish is one of the priority areas of teaching at primary and lower secondary schools. One of the aims of this effort is to deal with problems in the transition of the young people to youth education — including the vocational training.

2.2.2. Transition from primary and lower secondary school to youth education

Educational, vocational and labour market guidance

2.2.2.1.

Instruction in educational, vocational and labour market prospects already starts in the first class. The aim of the instruction is to prepare pupils to make an educational or vocational choice after primary and lower secondary school. The purpose of the instruction is to instil in pupils a general awareness of educational and vocational possibilities and to motivate them to undergo training.

2.2.2.2.

The Ministry of Education works out a guideline curriculum with proposals for the detailed organisation of teaching, but it is the local government administration which approves the school curriculum, based on proposals from the individual boards of governors. The teaching is often divided up into three stages, each with its own general topic. The first stage runs from the first to the third class. An example of a general topic might be 'school'. In the second stage, from the fourth to the seventh class, the topic is extended to 'school and the local area', and in the third phase, from the 8th to the 10th class, the topic 'school and society' forms the basis of study.

2.2.2.3.

In the third stage, the teaching and contact with society in general are intensified. One of the means used by the school to achieve this is to arrange meetings with figures involved in vocational and training activities. The pupils undertake study visits or are sent to enterprises and institutions for practical experience. The practical period is usually undertaken at the 9th–10th class stage. Finally, pupils have an opportunity to take part in introductory courses at vocational schools, upper secondary schools or other educational establishments. These courses last from one to five days. In the 10th class, the pupils can also take advantage of bridging programmes (see below).

2.2.2.4.
Educational, vocational and labour market guidance is compulsory, but is not a standalone element in the curriculum. The instruction often takes place in free class discussion periods or as an integral part of other subjects taught at primary and lower secondary school. It is one of the jobs of the class teacher to provide the instruction, with the help of the class's other teachers giving lessons and the school guidance officer.

2.2.2.5.
Each primary and lower secondary school has a school guidance officer, whose main task is to advise and counsel individual pupils and to supervise the preparation of the training and action plan of each pupil, with help from the class teacher and the other teachers at the school. In addition, the school guidance officer coordinates the guidance and counselling function at the school and oversees cooperation with the local authority school consultant and other guidance arrangements. The school guidance officer is the connecting link between the school and society in general and is thus responsible for visits, periods of practical experience and the like in enterprises and institutions. Finally, the school guidance officer has to assist in the choice of suitable teaching materials and methods. The school guidance officer is one of the school's own teachers, having this special assignment as part of his or her job.

Bridging

2.2.2.6.
The bridging initiative, as we have already seen (Section 2.1.4), is a new initiative launched by the government to get more young people into youth training. The bridging programmes are a guidance and teaching process lasting up to one year and cutting across boundaries between existing training facilities and types of school. The programmes are offered to pupils in the 10th class and to young people up to the age of 19.

2.2.2.7.
This initiative is targeted primarily at young people who, after the 9th and 10th class, are still not ready for, or need more time to make their choice of, further education or occupation. Bridging programmes are also available to young people who have dropped out of youth education. The aim of the programme is, firstly, to give young people a basis on which to make their educational or vocational choice and, secondly, to motivate them to continue their education. This is done by allowing them to try out for themselves what youth education involves.

2.2.2.8.
A bridging programme consists of combinations of existing educational facilities. The bridging programme can either combine introductory courses to several youth education options or combine the introductory part of a youth education course with other teaching and work experience facilities, for example at production schools or AMU centres or in job-creation projects.

2.2.3. Youth education

2.2.3.1.

Broadly speaking, youth education courses can be divided into three groups:

- courses leading to academic qualifications;
- courses leading to vocational qualifications; and
- individual youth education courses.

2.2.3.2.

The table below shows trends in admissions to the various youth education streams. One of the points to note is that admissions to vocational youth education courses fell from 61 to 53 % in the period 1985 to 1995. This reduction is due in part to the new individual youth education courses, which attracted 2 % of an annual intake, and in part to the popularity of vocational upper secondary schools (*erhvervsgymnasium*), the intake at which rose from 8 % in 1985 to 15 % in 1995.

Table 8. **Pupils on youth education courses, 1985, 1990 and 1995**

	1985	1990	1995	1985	1990	1995
	Number of persons			Per cent		
Total vocational	**136 810**	**124 406**	**129 592**	**61**	**56**	**53**
EUD, commercial	55 829	50 290	47 347	25	23	19
EUD, technical	73 755	67 737	69 343	33	30	29
SOSU	4 455	3 386	11 204	2	2	5
Other vocational	2 771	2 993	1 698	1	1	1
Total upper secondary	**89 344**	**99 211**	**108 790**	**40**	**44**	**45**
General *gymnasium*	58 519	57 250	59 091	26	26	24
Of which: mathematics	38 270	36 726	34 423	17	16	14
languages	20 249	20 524	24 668	9	9	10
HF	12 043	14 307	13 313	5	6	6
University entrance course	1 589	1 663	968	1	1	0
Vocational *gymnasium*	17 193	25 991	35 418	8	12	15
Of which: HHX, multiannual	12 483	18 385	23 397	6	8	10
HHX, one-year	2 274	2 705	3 898	1	1	2
HTX	535	2 367	6 262	0	1	3
Other upper secondary	1 901	2 534	1 361	1	2	0
Total individual education course	**0**	**0**	**3 921**	**0**	**0**	**2**
EGU	0	0	1 621	0	0	1
FUU	0	0	2 300	0	0	1
Total	**226 154**	**223 617**	**242 303**	**100**	**100**	**100**

NB: Compiled at 1 October in the year, i.e. for 1995 at the start of the 1995/96 school year. EUD stands for vocational training. The group 'Other vocational' includes merchant navy, agriculture, forestry, home economics and craft courses/training facilities. The group 'Other upper secondary' comprises preparation for the entrance examination for engineering courses and the workshop course. EGU stands for basic vocational education, FUU for free youth education (see also Annex 1).

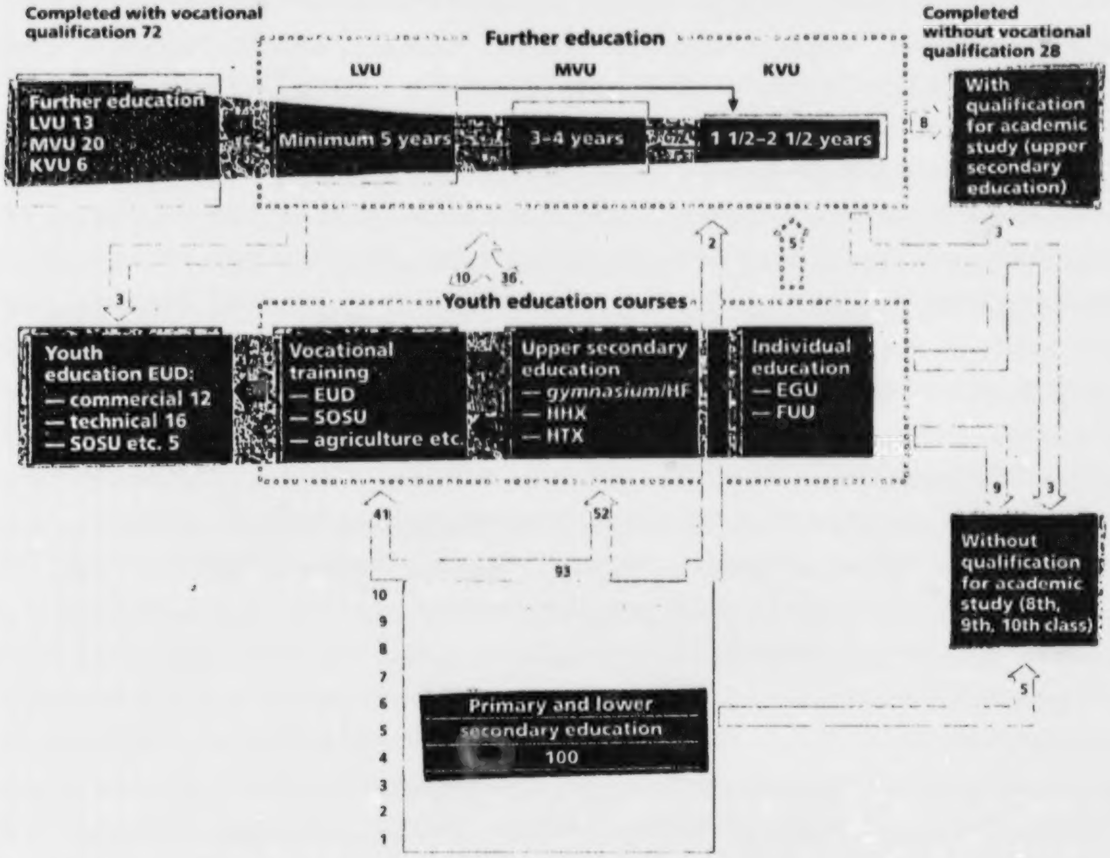
SOURCE: *DANMARKS STATISTIK AND MINISTRY OF EDUCATION IN UDDANNELSESREDEGØRELSE 1997, P. 59.*

2.2.3.3.

In 1996, a consistent system of standards was introduced for the general subjects in all youth education courses. This means that training stages completed on one course can be carried forward as training credit to other youth education courses. The general subject in youth education courses has been subdivided into seven levels, ranging from level G, corresponding to the primary and lower secondary school leaving examination, to level A, which is the top upper secondary school level.

2.2.3.4.

Figure 11. The education system–structure and pupil flows, 1995


Completed with vocational qualification 72
Further education
Completed without vocational qualification 28
LVU
MVU
KVU
Further education LVU 13 MVU 20 KVU 6
Minimum 5 years
3-4 years
1 1/2-2 1/2 years
8
With qualification for academic study (upper secondary education)
3
2
5
10
36
3
Youth education courses
Youth education EUD: — commercial 12 — technical 16 — SOSU etc. 5
Vocational training — EUD — SOSU — agriculture etc.
Upper secondary education — gymnasium/HF — HHX — HTX
Individual education — EGU — FUU
9
3
41
52
93
Without qualification for academic study (8th, 9th, 10th class)
5
10
9
8
7
6
5
4
3
2
1
Primary and lower secondary education 100

NB: For explanation of acronyms, see Annex 1.

SOURCE: ***MINISTRY OF EDUCATION: UDDANNELSE PÅ KRYDS OG TVÆRS, 1997.***

The above figure shows the proportions of a class-year moving into and out of the various courses. It is not possible to indicate entrance to and exit from the individual courses, since they were not introduced until 1993 and 1994, respectively, and therefore do not feature in the final statistics. The arrow with the dotted outline

BEST COPY AVAILABLE

shows that about 5 % of young people commence a further training course after starting but not completing a youth education course.

It can also be seen from the figure that, for the class-year as a whole, 72 % completed a course leading to a vocational qualification in 1995 (EUD or further training). Eleven per cent completed an upper secondary school course, and 17 % did not follow any youth education. Of those 17 %, many will typically have started a youth education course; only 5 % — the 'residual' group — will never have begun a youth education course after primary and lower secondary school.

Youth education/upper secondary (*gymnasium*) courses leading to academic qualifications

2.2.3.5.
Upper secondary school courses offer the possibility of continuing in further education. Young people can choose between four different upper secondary education courses:

- the traditional three-year upper secondary school course, which concludes with the school-leaving certificate qualifying for university entrance (*studentereksamen*). This youth education course was previously reserved for a small élite in society but today is a 'mass education' provision. Thus, 38.4 % of the educational year in 1995 chose general upper secondary education. The entrance requirement for the upper secondary school is completion of the ninth class at primary and lower secondary school and a certificate of suitability for upper secondary education from the lower school. Pupils can choose between a language stream and a mathematical stream, with a wide range of compulsory subjects plus a number of optional subjects;

- the higher preparatory examination (HF) is a two-year alternative to the *studentereksamen*. Here the entrance requirement is completion of the 10th class at primary and lower secondary school;

- the higher commercial examination (HHX) is a three-year course of upper secondary education focusing on commercial subjects. The entrance requirement is completion of the ninth class at primary and lower secondary school. For young people who already have the *studentereksamen* or an HF qualification, there is a one-year concentrated course;

- the higher technical examination (HTX) is a three-year course of upper secondary education focusing on technical subjects. The entrance requirement is completion of the 9th class at primary and lower secondary school.

HHX and HTX examinations are given at vocational schools, which also offer vocational education courses. The popularity of vocational upper secondary school courses is rising and, in 1995, HHX and HTX accounted for 12 and 3 % of the class-year respectively (see also Section 3.3.19).

Courses leading to vocational qualifications

2.2.3.6.
The occupationally based vocational education courses consist of vocational training (*erhvervsuddannelserne* — EUD), social welfare and healthcare training (*social- og sundhedsuddannelserne* — SOSU) and other courses in the fields of agriculture, the merchant navy, etc. The courses take typically between two and four years and provide vocational qualifications and, in addition, a qualification to study certain further education courses. Full entrance qualification in some cases is only obtained by taking a special supplementary entrance examination. There are 89 vocational training courses. On most, further specialisation is possible. Students taking the metalworking course, for example, can choose from among 11 special courses, including training as a blacksmith, fitter and welder. Eighty-nine vocational training intake options can thus result in something over 210 different outcomes (see also Section 3.2).

Individual courses

2.2.3.7.
The individual courses include basic vocational education (*erhvervsgrunduddannelse* — EGU) (see Section 3.3.15) and free youth education (*Den frie ungdomsuddannelse* — FUU). The students assemble their own courses from elements of other courses. The courses do not on their own provide study or vocational qualifications. However, individual components can in some cases be carried forward as training credit to other courses.

State Education Fund

2.2.3.8.
Young people over 18 on a youth education course are entitled to an allowance from the State Education Fund (*Statens Uddannelsesstøtte — SU*). SU allowances are paid to all students over 18 on a youth or further education course and to adults without formal training after primary and lower secondary education (adult education support).

For young people on a youth education course, an SU allowance is paid until they are 20, irrespective of their parents' income. The allowance is fixed at (1998):

- DKK 1 852 (EUR 265) per month for persons living at home;
- DKK 3 669 (EUR 525) per month for persons living away from home (see also Sections 2.2.4.5 and 4.1.7).

2.2.4. Further education

2.2.4.1.
Further education courses in Denmark can be divided into three categories, according to level and admission requirements:

- short further education courses (*kortere videregående uddannelserne* — KVU);
- medium-length further education courses (*mellemlange videregående uddannelser* — MVU); and
- long further education courses (*langerevarende videregående uddannelser* — LVU).

2.2.4.2.
Admission to a further education course normally requires completion of a youth education course. Over and above the general admission conditions, there are also specific entrance requirements for many further education courses. There may, for example, be a requirement for a pass in a particular subject at a certain level in the entrance examination.

2.2.4.3.
In 1993, 45 % of the total class-year were admitted to further education courses of one kind or another. A quarter dropped out during their course, so that approximately 34 % of the year completed a further education course. The breakdown of the 34 % was: 6 % on short courses, 18 % on medium-length courses and 10 % on long courses.

2.2.4.4.
The State finances the majority of further education courses, irrespective of whether they take place at State or autonomous establishments. The teaching is free of charge to the students, but they must purchase their own books and other tuition materials.

2.2.4.5.
Students on a further education course are entitled to SU support for the number of months/years the course normally takes. In addition to that, students have the option of applying for a further 12 SU vouchers in the event that they change courses or their studies take longer to complete.

Shorter further education courses (vocational academy courses)

2.2.4.6.
Short further education courses comprise courses of one to three years' duration and are as a rule geared to a concrete area of employment. They include advanced technicians' courses, market economist courses and computer studies courses and function as bridging courses for young people who have taken a vocationally oriented course, but they are open to anyone. The courses are provided by the vocational schools (see also Section 3.4.47).

Medium-length further education courses

2.2.4.7.
Medium-length further education courses last three to four years. They offer a very varied range of training options, covering a large number of courses geared to professions, which are offered at specialised training establishments (for example, teacher training, child-carer training, nursing, occupational therapy and physiotherapy). The admission requirement for medium-length further education courses is, as a rule, an upper secondary school leaving certificate or equivalent qualification, sometimes with specific subject and level requirements. In addition, medium-length further education courses also include the bachelor's course offered by universities and other higher education institutes. The bachelor's course is a three-year standalone finishing course leading to a vocational qualification and eligibility for postgraduate training (*kandidat*).

Long further education courses

2.2.4.8.
Long further education courses are of five to six years' duration. These are research-based and take place at universities and other higher education institutes. Broadly speaking, all university courses have been harmonised and are today structured as three-year standalone bachelor's courses, followed by two years' postgraduate training. There are, however, individual ones, which do not follow this model, for example training for civil engineers, doctors and theology. The admission requirements for postgraduate training are completion of a bachelor's course or another form of training approved as an entry requirement by the admitting institution.

2.2.5. Adult and continuing education

2.2.5.1.
Adult and continuing education are to a large extent provided by the State. Hence both general and vocationally oriented adult education involve a high degree of public financing.

2.2.5.2.
General adult education is provided at adult education centres (*voksenuddannelsescentre — VUC*). Here individual subjects are taught to qualification level, including both subjects covered by examinations in the 9th and 10th class of primary and lower secondary school and to subjects taught for the higher preparatory examination (HF). The purpose of this scheme is to provide opportunities for adults to improve or supplement their general knowledge and skills. The State pays for the expenses of conducting examinations, but the counties pay for the teaching itself.

2.2.5.3.
General adult education is also provided at day folk high schools (*daghøjskoler*), whose main purpose is to provide instruction for persons over 18. The aim is to enhance the personal development of early school-leavers and to improve their prospects both in the education and training system and on the labour market. Teaching is given on a full-time basis. Courses are financed by the State, the counties and the municipalities.

2.2.5.4.
Vocationally oriented adult education is provided at both adult vocational training centres (AMU centres) and vocational schools. The purpose is to upgrade the qualifications of the labour force to meet the needs of the labour market. The courses are aimed primarily at unskilled, semi-skilled and skilled workers (see also Section 3.4.12).

2.2.5.5.
The vocationally oriented courses are also provided under the Open Education Act (*lov om åben uddannelse*). The act applies mainly to vocational schools and further education establishments and enables establishments to offer short courses but also to offer all the vocationally oriented courses for which they already have approval as part-time courses or as individual-subject courses, which can be combined in modular form. Part-time courses can be offered on a full-time basis within one year so that they can be taken, for example, in conjunction with training leave. Tuition fees are payable (see also Section 3.4.60).

Chapter 3
The vocational training system

3.1. Historical development of vocational training

The period up to 1870

3.1.1.
Organised apprentice training originated in the early 1400s, when Eric of Pomerania, partly as a move against the Hanseatics, granted to a number of country towns a monopoly to perform certain trades and handicrafts. In each country town, each trade set up its guild. The guilds laid down the training time for apprenticeships, the apprentices' pay and working conditions and the skills the apprentices were to be taught. The guilds also held the examinations and tests for apprentices to become journeymen.

3.1.2.
The guild system functioned well up until the Napoleonic wars, and on the whole, apprentices could expect to become master craftsmen. From the beginning of the 19th century, however, changes took place in the market and capital structure, resulting in a reduction in the number of independent masters and a deterioration in apprentices' conditions.

3.1.3.
In the early stages, apprentice training already had an element of schooling. The first attempt to introduce organised education on a wider scale dates from 1622, when King Christian IV started a school to teach clothing production, with German and Dutch master craftsmen as instructors. In 1800, Sunday schools were established for apprentices to improve the skills of prospective craftsmen in reading and arithmetic. Education for apprentices was optional and included only the elementary school subjects.

3.1.4.
Economic and political liberalism in the first half of the 19th century led to a call for abolition of the guild system and, under the 1857 act on freedom of trade (*næringsfrihedsloven*), the guilds were deprived of their rights. This was a setback to apprenticeship training, as it abolished the obligation on employers to conclude contracts with apprentices and the obligation on apprentices to take the journeyman's examination at the end of their apprenticeship. At the same time, the right to engage freely in trade was introduced. This was a real threat to the craft trades, and associations were formed throughout the country to defend handicrafts. The establishment and running of technical schools was a natural focus of activity for these associations. As early as 1870, some 50 technical schools had been set up by local craft and industrial associations. Freedom of trade was a prerequisite for industrialisation, but at the same time it meant that the vocational training which had been under the authority of the guilds suffered a severe blow.

The period 1870–1960

3.1.5.
From 1875 onwards, the government and the municipalities provided substantial grants to set up technical and commercial schools, with the result that by 1910 they numbered around 170.

The Apprenticeship Act (*lærlingeloven*) of 1889 restored some provisions governing the conditions of apprentices and reintroduced the contractual relationship between master craftsman and apprentice. Schooling was established on more permanent lines and the 'Technical School Association', set up in 1891, began to develop syllabuses and to issue textbooks. The 1889 Act stated that, for apprenticeship training in the commercial and clerical field, employers were obliged to send their apprentices to be taught at commercial schools. The tuition was planned, administered and provided on a local basis. Attendance by apprentices was compulsory and the tuition was given in evening classes.

3.1.6.

At this time, there were a number of sweeping economic, political and social changes. These were of fundamental importance for the interaction between government and the social partners, and still are today. Industrialisation brought with it radical changes on the labour market. In the 1880s, local trade unions were formed, amalgamated into national federations, which from 1898 were combined in the Danish Federation of Trade Unions (*De samvirkende Fagforbund*, subsequently *Landsorganisationen in Danmark — LO*, the Danish Confederation of Trade Unions). Employers' assocations were also formed at this time and combined in 1896 to form the Danish Employers' and Master Craftsmen's Association (*Danske Arbejdsgiver- og Mesterforening*, subsequently *Dansk Arbejdsgiverforening — DA*, the Danish Employers' Confederation).

3.1.7.

Following the general strike in 1899, workers and employers agreed on a general industrial relations settlement, the 'September compromise' (*Septemberforliget*) of 1899, the basic principles of which still apply today. These institutional frameworks are very important for the further development for vocational training. An act on State supervision of technical education was adopted in 1916 and a similar one for commercial education in 1920.

3.1.8.

The 1921 Apprenticeship Act introduced a provision enabling the employers' and employees' organisations in the individual trades to recommend the holding of final apprentices' examinations to the Minister for Education. This acquired great importance for future cooperation on apprentice training between employers, workers and the government. In the 1920s the first trade or occupational committees were formed, in which the organisations representing master craftsmen dealt with questions concerning apprentice training schemes, including school matters, on an equal footing with the trade unions.

3.1.9.

With the 1937 Apprenticeship Act, the trade committees became statutory and were assigned a number of crucial functions relating to apprentice training. At the same time, an apprenticeship coordinating council was set up, as an umbrella body for all apprentice training schemes. In 1937, compulsory education for apprentices was introduced.

3.1.10.

The new 1956 Apprenticeship Act resulted from a number of factors. In the national planning of training in the early 1950s, the central problem was to make provision for the high birth rates of previous years. The concern to avoid high youth unemployment was reflected in a desire to increase the number of apprentice training places. Prior to this, the number of apprenticeships had been limited in order to guarantee a basis for thorough trade training, but the new 1956 Apprenticeship Act abolished restrictions on the number of apprentices. This must also be considered against the backdrop of industry's urgent need for skilled labour. There had been growing dissatisfaction with teaching in technical schools in the period prior to 1956. Teaching now switched from evening classes to daytime courses, with very different educational requirements. At the same time, the role of the trade committees was strengthened, in that they were now also consulted on the development of curricula for apprentices' schooling.

3.1.11.

In recognition of the shortage of technical and scientific skills in the labour force, a technicians' commission (*teknikerkommission*) was set up in 1956, which produced a report in 1959 (*Betænkning* 229). The commission presented a number of concrete proposals for an increase in shorter technical courses based in part on school education and in part on trade training. In that context, a special technical preparatory examination was developed geared to a minimum level of knowledge to be achieved on these courses.

The period 1960–87

3.1.12.

Although the 1956 act modernised apprenticeship training considerably, criticism of the apprentice system as a whole remained. The 1960s was a period of strong economic growth, with a surge in numbers employed and a substantial drop in unemployment. This resulted in bottlenecks due to a shortage of skilled labour. For industry, in particular, which needed a flexible, mobile and more specialised labour force, the 1956 act was outdated. At the same time, an increasing number of young people were choosing an academic education, and numbers in apprenticeship training were insufficient to cover the demand for skilled labour.

3.1.13.

To counteract this, semi-skilled workers' schools were set up in the 1960s and, at the beginning of the 1970s, experiments were launched on a new structure for basic vocational training. These resulted from a number of points of criticism raised in a committee report (*Betænkning* 612) in 1971 on basic vocational training. The committee's criticism of the existing apprenticeship schemes can be summarised as follows:

- too early choice of occupation, i.e. at the start of an apprenticeship, when young people often do not have a realistic basis on which to make such a choice;
- lack of coordination between on-the-job training and schooling, and in many instances inadequate planning of training and inadequate instruction during in-company training;
- many firms too specialised to provide apprentices with adequate all-round training;
- insufficient importance attached to general qualifications and education; and
- lack of consistency in the training system as a whole for the 16–19 age group.

3.1.14.

For an experimental period, a new structure and new guidelines for basic vocational training were tested. In 1977, the Vocational Education and Training EFG Act (*lov om erhvervsfaglige grunduddannelser*), was passed. The crucial new element in the EFG system, compared with apprenticeship training, was that the training started with a whole year at technical school. This period was used to provide a broad introduction to a whole 'family' of occupational courses. At the same time, more detailed vocational and training guidance was given, as was continued general education and tuition for general qualifications, following on from primary and lower secondary education.

It was assumed that apprentice-training courses run on the basis of the craft apprenticeship scheme would stop completely by 1982 at the latest, but this did not happen. EFG training was adversely affected by the low-growth conditions of the 1970s. It was not possible to provide a sufficient number of in-company training places for the many young people who, on finishing their basic year, applied for an on-the-job place with a company in order to complete their training. The labour famine of the 1960s was replaced by the employment crisis of the 1970s.

3.1.15.
Consequently, the 1980s witnessed the existence of two parallel systems of vocational training in Denmark, namely apprentice training schemes pursuant to the 1956 Apprenticeship Act, and vocational education and training (EFG) schemes pursuant to the EFG Act of 1977. Both were alternance training systems. However, the systems differed considerably in their training structure and in their management and advisory structure.

3.1.16.
An important innovation was the introduction of technical upper secondary education leading to the higher technical examination (HTX) on an experimental basis in 1982. This gave rise to two courses of upper secondary vocational education combining both theoretical and practical training. The HTX joined the higher commercial examination (HHX), which had already been introduced as a private initiative in 1888.

The period 1987–97

3.1.17.
Many of the points of criticism raised at the beginning of the 1970s came to play a major role in the 1980s. In May 1986, the Ministry of Education set up a committee to review the vocational education schemes. The committee issued its report (*Betænkning* 1112) in June 1987. The report recommended that a system be set up to embrace the existing apprentice training schemes, the EFG-schemes and the basic technical training schemes. In addition, it emphasised that the schemes should have youth education status, and at the same time provide vocational qualifications and a basis for further training. Finally, the report noted that there were important areas in which there were grounds for considering the introduction of new training courses.

3.1.18.
The Vocational Training Act (*lov om erhvervsuddannelser*) was passed by a huge majority in Parliament on 30 March 1989 — exactly 100 years after the first Apprenticeship Act in Denmark. The legislation on vocational schools was adopted on the same day. Thus with effect from 1 January 1991, the vocational education and training system was radically altered. The legal basis for the vocational education and training reform consisted in the first instance of the Vocational

Schools Act (*lov om erhvervsskoler* — Act 210, 1989) and the Vocational Training Act (*lov om erhvervsuddannelser* — Act 211, 1989).

3.1.19.

The Vocational Schools Act forms the general framework for the management and financing of the vocational schools and their activities in general. The status of such schools as institutions was thus redefined, and there was extensive devolution of powers to the schools. Vocational training reform was split up into two acts because the vocational schools are responsible for many different training activities in addition to basic vocational education. The conditions and scope for the operation of the schools were considerably made much more flexible.

3.1.20.

The Vocational Training Act replaced the Apprenticeship Act and the EFG Act and formed the general framework for the training field, which had hitherto been covered by apprenticeship training schemes, EFG schemes and basic technical training (e.g. laboratory technician and technical assistant). For these training schemes, there is now a common set of rules. Thus a combined system was established for all basic vocational education and training at commercial schools and technical schools. These training schemes, of which there are now 89 (compared with up to 300 previously) with over 200 special courses, are all organised on the basis of alternance training, alternating between time in school and periods of work experience. Restrictions on admission have been deliberately reduced (11 courses had admission restrictions in 1996), and students and companies now have the freedom to choose schools. All courses lead to skilled worker training certificates.

3.1.21.

An important innovation, something that is unique in Europe, consisted of the proposal adopted by Parliament in 1992, that it should be possible for young people to spend the whole or part of their practical period of training abroad (*PIU-ordningen*). The reasons were, in part, the major problems of providing work experience places for young people on vocational training courses and, in part, the desire to make courses more attractive. At the same time as it was made legislatively possible, preparations were made for some expenditure in connection with this to be covered by an employers' scheme for the reimbursement of trainees' wages, *Arbejdsgivernes Elevrefusion* (*AER*) (see also Sections 3.2.41, 4.2.13 and 6.6.3).

Historical background to the adult vocational training (AMU) system

3.1.22.

Adult vocational training or 'labour market training' (*arbejdsmarkedsuddannelserne — AMU*, until 1985 known as *specialarbejderuddannelserne* — semi-skilled worker training) are an essential part of the vocational training system. The intention of these courses is to provide both the correct short-term qualification for relevant job functions and a more long-term upgrading of qualifications which may reduce structural problems on the labour market. A very high proportion of workers in industry are unskilled.

3.1.23.

During the industrial boom at the end of the 1950s and the concomitant migration from the countryside to the towns, the need arose for trained manpower in a number of trades and industries. To meet this pressing need, the act of 18 May 1960 on the training of unskilled workers (*loven af 18. maj 1960 om uddannelsen af* *ikke-faglærte arbejdere*) was adopted, providing new opportunities for nationwide, systematic training in a number of areas. In 1965, the Executive Order on continuing training for skilled workers (*bekendtgørelsen om efteruddannelse af faglærte arbejdere*) was issued, and in 1975 introductory vocational courses for unemployed young persons (*erhvervsintroduktion for unge — EIFU*) were brought in to combat increasing unemployment. Subsequently, in 1979, they were supplemented by introductory vocational courses for unemployed adults (*erhvervsintroduktion for ledige voksne — EIFL*).

3.1.24.

In 1985, Parliament adopted a new, revised act on adult vocational training, or 'labour-market training courses' (*lov om arbejdsmarkedsuddannelser — AMU*). The new act provided for a different classification, dropping the reference to semi-skilled worker training; hence also a change of name from semi-skilled workers' schools to AMU centres. The intention of the act was to ease problems of redeployment and readjustment on the labour market through measures grounded in employment policy. Tuition is provided primarily at AMU centres. With the legislative changes of 1985 and after, the AMU centres acquired greater scope for adjusting their activities to local labour market needs. In addition to the traditional planned course provision, courses adapted to company requirements (*VTP* courses), partially paid for by the user-company, and training activities funded entirely by revenue (*IDV* courses) were also introduced.

3.1.25.

The desire to make the provision of adult and continuing training more demand-led gave rise to new and wide-ranging changes in the AMU legislation in 1993 and 1995. Under these, the training offered to the AMU target groups, semi-skilled and skilled workers, were combined and the management structures simplified. In addition, the target group was widened to include further training for technicians and public employees in the social welfare and health sector. A number of new framework conditions were also laid down for the training provision:

- free admission to all AMU courses, combined with some participant contribution to costs;
- development of courses able to meet the increasing demand for general and process-neutral qualifications and development of more coherent training programmes;
- more flexible forms of delivery through the development of new teaching methods, experiments on open workshops and use of new educational technologies;
- change of direction in the AMU provision for the unemployed: from work introduction programmes to individual skills assessment and formulation of individual action plans;
- local cooperation between AMU centres and other schools (vocational schools, adult education centres, etc.) has been formalised, with the formation of a local cooperation forum with a view to the joint use of resources and joint information and guidance to enterprises and users.

A general overview of the historical development of the vocational training system is presented in the figure below.

Figure 12. **Historical development of the system**

1857	Act on freedom of trade (*næringsfrihedsloven*)
1889	Apprenticeship Act (*lærlingeloven af 1889*)
1891	Setting up of Technical School Association (*Teknisk Skoleforening*)
1916	Act on State supervision of technical education
1920	Act on State supervision of commercial education
1937	Apprenticeship Act (*lærlingeloven af 1937*) Introduction of compulsory education for apprentices
1956	Apprenticeship Act (*lærlingeloven af 1956*)
1960	Act on training of unskilled workers
1965	Executive order on continuing training for skilled workers
1975	Introductory vocational courses for unemployed young persons (EIFU)
1977	Vocational Education and Training Act (EFG)
1979	Introductory vocational courses for unemployed adults (EIFL)
1985	Labour Market Training Courses Act (AMU)
1989	Vocational Training Act Vocational Schools Act
1991	Reform of the social welfare and healthcare training (SOSU) and courses in the field of agriculture
1993	Establishment of basic vocational training (EGU) Change in Labour Market Training Courses Act
1995	Change in Labour Market Training Courses Act
1996	Reform of commercial vocational training

3.2. Vocational education and training schemes

Introduction

3.2.1.
Vocational education and training schemes (EUD) are part of the youth education system. That means that they form an extension to primary and lower secondary education, normally consisting of nine years at school. Vocational training schemes are courses providing vocational qualifications and skills that can be put to immediate use in working life. It is the trade committees (see Section 3.2.6) which identify training needs, take initiatives on training measures, specify courses and award qualifications. This ensures that vocational training schemes offer qualifications that can be used in business and industry.

3.2.2.
Vocational education and training courses are offered at vocational schools, which are autonomous institutions with boards of governors consisting of representatives of the social partners, the municipality and the county. The schools have considerable freedom to organise and implement educational activities and direct financial operations.

Aims of the vocational training schemes

3.2.3.
The purpose of vocational education and training in Denmark is to provide young people with both vocational training and broadly based youth education. This is laid down in the aims section of the Vocational Training Act (Act 211, 1989).

This states that the training system shall:

- motivate young people to train and ensure that all young persons who desire vocational training have genuine opportunities to obtain it and are able to choose from a substantial number of training schemes;
- give young persons training which provides a basis for future working life and contributes to their personal development and to their understanding of society and its development;
- satisfy the needs of the labour market for occupational and general qualifications, required to develop trade and industry, including the development of the structure of trade and industry, labour market conditions, workplace organisation and technology;
- provide persons seeking training with a basis for further training.

3.2.4.
A prime objective of training policy in Denmark is to ensure that the nature of vocational training as a form of broadly based youth education is preserved and that the courses provide sound possibilities for continuing training. Not only young persons who choose youth education at upper secondary school or on a course leading to the higher preparatory examination (HF), but also those who choose vocationally based youth education, should receive an all-round education which, besides being important for participation in working life, is equally relevant to other areas of life.

3.2.5.

Under the legislation on vocational schools and vocational training, the Minister for Education has to issue a number of regulations governing training schemes. The General Executive Order (*hovedbekendtgørelse*) of 12 February 1990, makes provision for approval of vocational training schemes.

3.2.6.

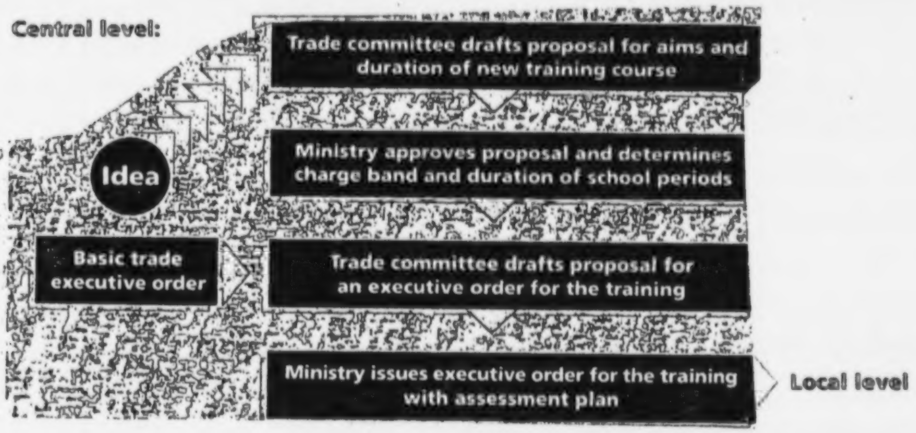
The employers' and employees' organisations are required to appoint a number of trade or occupational committees (*faglige udvalg*), on which they have equal representation. The trade committees (of which there are at present 55) must monitor all training on which there is legislation. The trade committees also have the task of taking the initiative in setting up new courses.

3.2.7.

Should a trade committee wish to recommend the creation of a new training course, the recommendation must be accompanied by statistical data. The committee must, for example, provide information on expected job and practical training opportunities, on the estimated annual intake to the course and information on any existing analyses and forecasts concerning qualification requirements in the area concerned.

The figure below shows the decision-making procedure relating to the creation and approval of new vocational training courses.

Figure 13. **Training course from conception to implementation**


Central level:
Trade committee drafts proposal for aims and duration of new training course
Idea
Ministry approves proposal and determines charge band and duration of school periods
Basic trade executive order
Trade committee drafts proposal for an executive order for the training
Ministry issues executive order for the training with assessment plan
Local level

SOURCE: ***THE DANISH INSTITUTE FOR EDUCATIONAL TRAINING OF VOCATIONAL TEACHERS, 1998.***

3.2.8.

At central level the proposal is sent to the Minister, who decides on the basis of the Vocational Training Advisory Council's recommendation whether to approve the training course. The trade committees develop the objectives and scope for the

BEST COPY AVAILABLE

individual training courses and the Ministry decides on the duration of the school instruction required for the course and on the financial implications.

3.2.9.

An executive training order must be issued for each course, containing provisions on:

- the purpose, structure and aims of the courses involved;
- the aims and general framework for the school part of the training; and
- the practical part, including basic subjects which the trade committee has selected, a description of aims and content of area subjects and special subjects, provisions for on-the-job training and for assessment and final examinations.

The executive training order also makes provision for course certificates covering the training course in question.

3.2.10.

These executive orders contain all the specific provisions relating to the course collected together in one document. Together with common rules (e.g. the executive order on examinations), they serve as a complete basis for the schools' planning and organisation of the teaching. It is not possible to lay down binding guidelines for the school part of the training centrally outside the scope of executive training orders.

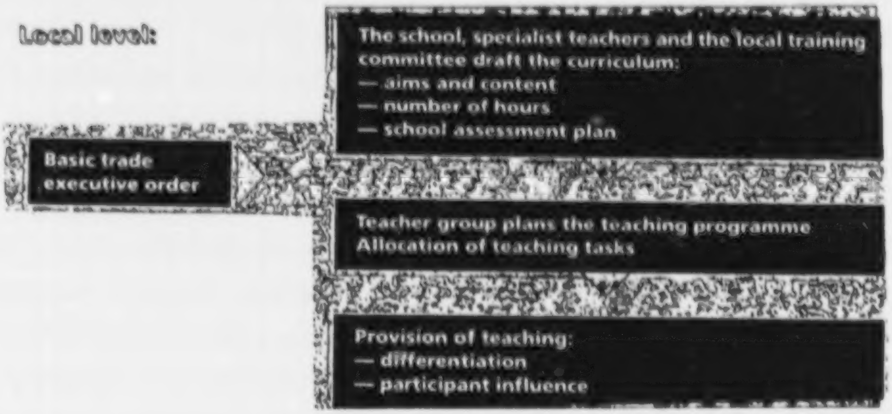
3.2.11.

When the executive training order has received ministerial approval, it is dispatched to the schools. At local level, the schools decide whether the training course in question is to be offered. The board of governors determines the annual programme for the school's activities, including what vocational training courses are to be offered. In special cases, however, the Minister for Education can order the school to provide particular vocational training courses.

3.2.12.

If the school decides to offer the course in question, the approval of the Ministry of Education must be obtained. The school may receive approval for courses which it decides not to offer. A training course which has not yet been approved can be offered by a school for a maximum period of two years. The school's tasks in connection with the inclusion of vocational training courses in its programme are shown in the figure below.

Figure 14. Training course from conception to implementation — local level



Local level:
Basic trade executive order
The school, specialist teachers and the local training committee draft the curriculum:
— aims and content
— number of hours
— school assessment plan
Teacher group plans the teaching programme
Allocation of teaching tasks
Provision of teaching:
— differentiation
— participant influence

SOURCE: *THE DANISH INSTITUTE FOR EDUCATIONAL TRAINING OF VOCATIONAL TEACHERS, 1998.*

Training structure and admission routes

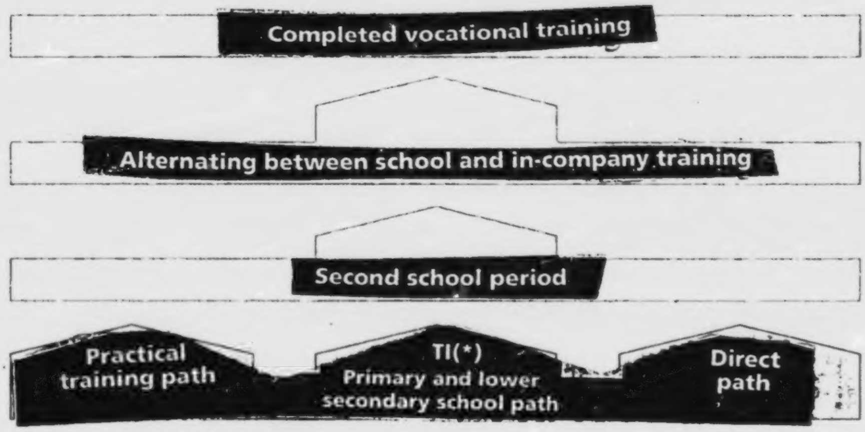
3.2.13.
The structure of training is based on the alternance training principle, i.e. relatively brief theoretical training alternating with practical work experience (on-the-job training) in a company. The duration of courses does not generally exceed four years, with theoretical training normally not exceeding 80 weeks. The trade committees decide upon the detailed structure — the mode of alternating between school and in-company training.

3.2.14.
Admission to vocational training presupposes that compulsory education (normally nine years' schooling) has been completed. Admission is not conditional on the possession of examination certificates. Thus prospective trainees do not need to have the primary and lower secondary school-leaving certificate to be admitted to a vocational training course.

A fundamental principle is that there should be unlimited access to vocational training. For a number of minor courses, however, there are admission restrictions on the school path. This applies to courses for hairdressers, beauticians, photographers, serigraphers and veterinary assistants, amongst others.

BEST COPY AVAILABLE

Figure 15. **Training structure and admission routes (technical vocational training courses)**


Completed vocational training
Alternating between school and in-company training
Second school period
Practical training path
TI(*)
Primary and lower secondary school path
Direct path

(*) Introductory technical studies programme.

SOURCE: ***MINISTRY OF EDUCATION.***

3.2.15.

There are two routes of access to a vocational training course: the school path and the practical training path. The trainee can either enrol on a course and commence theoretical instruction at school, i.e. enter the second school period, or start with practical training in an enterprise. Regardless of the entry path chosen, duration and content of training are identical.

3.2.16.

In addition, it is possible for trainees who have not yet decided what course to take to complete an optional, flexible first school period at either a commercial school (HI — introductory commercial studies programme) or a technical school (TI — introductory technical studies programme). The first school period may last from 5 to 40 weeks (one year), depending on the degree of help the trainee needs in reaching a decision. During the first school period, the trainee is able to try out a number of subjects on both a practical and a theoretical basis. After the first school period, trainees choose a course and go on either to the second school period or to practical in-company training.

3.2.17.

Trainees who choose the school path must, after the second school period (20 weeks), obtain a practical training place and sign a training contract. It is up to the individual trainee to secure a place, but the study and practical placement service of the vocational school can assist in this process. The schools offer trainees advice and guidance in the application process. They maintain cooperation with firms in the region and arrange practical training places if a firm contacts the school to recruit a trainee. In addition, the vocational training schools have lists of firms approved by the trade committees for training in the various special fields.

BEST COPY AVAILABLE

3.2.18.
If the trainee cannot find an in-company place, there are facilities to complete practical training at school instead. Practical training at school is offered to trainees who have not signed a training contract with a company four months after completion of the second school period or have started another course. It is, moreover, worth noting that a proportion of trainees drop out of their course rather than complete their practical training at school. Thus only a third of potential users of school practical training facilities choose to avail themselves of this option.

3.2.19.
Under the school practical training option, the practical part of a trainee's course is conducted in the school's workshops, in combination with periods of instruction in a company. In order to qualify for practical training at school, the trainee must be registered as seeking a practical training place with a company and meet the 'EMMA' (*Egnet, Mobil fagligt, Mobil geografisk, Aktiv praktik-pladssøgende*) criteria. He/she must be suitable, vocationally mobile, geographically mobile and actively seeking a practical training place.

3.2.20.
In order to follow the practical path, the trainees are required to have a training contract with a firm. The introductory practical instruction normally takes six months. After the first practical period, the trainee passes on to the second school period, lasting 20 weeks. Trainees who take the practical path, receive wages for the entire training period, while trainees who take the school path receive State training support until they have concluded a practical training contract and begin their in-company training.

The school path is the route of access most commonly taken in the vocational training system. About 85 % choose this mode of access. This figure has been relatively stable since 1994.

For trainees — especially adults — with a relevant background of employment and training, it is possible to skip the first and second school periods; this is known as the 'merit route'.

3.2.21.
The structure and admission paths for commercial school training are different and will be examined in Section 3.2.46.

Schoolteaching during vocational training

3.2.22.
With the EUD reform of 1991, the subject structure was altered, and management by objectives created completely new possibilities for decentralised educational and pedagogical renewal.

3.2.23.
The school-based part of all new vocational training schemes consists of a syllabus divided into the following four parts.

Basic subjects are practical and theoretical subjects combining general and industry or trade-oriented subjects. They aim to provide broadly based subject knowledge and are therefore normally common to several training areas. They also support the trainees' personal development and give them an understanding of society and its development. Finally, basic subjects provide trainees with the study qualifications to enable them to take advantage of continuing training opportunities within their area.

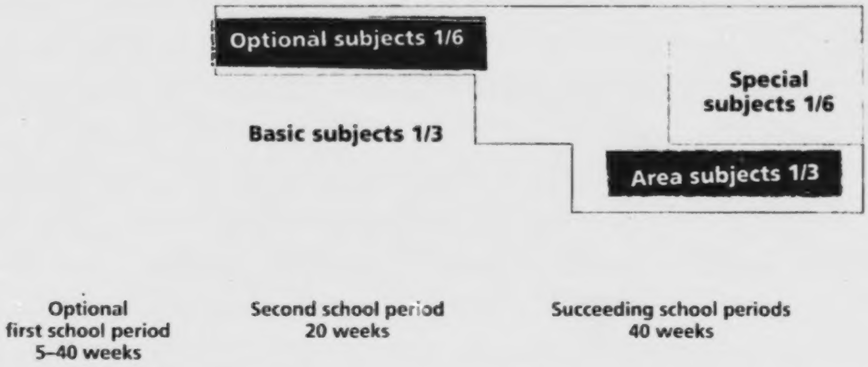
Area subjects comprise practical and theoretical instruction relevant to the course in question which helps to give the trainee both general and specific vocational proficiency.

At the highest level of vocational training, **special subjects** include practical and theoretical instruction with special relevance to part of the training. This provides the trainee with specific vocational skills.

Optional subjects should cater for the trainees' interests. Subjects must be offered which are important for continuing training and for admission to continuing training courses. In addition, optional subjects can be offered with a view to qualification requirements and employment opportunities within the local area.

The theoretical part of vocational training consists of these types of subjects from the second school period onwards. They are weighted against one another so that basic subjects and area subjects each represent one third, whereas special subjects and optional subjects each represent one sixth.

Figure 16. **Subject structure: maximum 80 weeks of schooling**


Optional subjects 1/6
Special subjects 1/6
Basic subjects 1/3
Area subjects 1/3
Optional first school period 5–40 weeks
Second school period 20 weeks
Succeeding school periods 40 weeks

SOURCE: ***THE DANISH INSTITUTE FOR EDUCATIONAL TRAINING OF VOCATIONAL TEACHERS, 1998.***

While the individual schools decide which optional subjects they are to offer, the trade committees have a decisive influence on basic subjects, area subjects and special subjects.

3.2.24.

Occupational emphasis lies mainly within area subjects and special subjects, since it is here in particular that the trainees become acquainted with the theoretical and practical aspects of their training. The trade committees define the area subjects and special subjects for each course and stipulate the objectives and scope of the instruction. All approved basic subjects are listed in the executive order on basic subjects, which is revised regularly. Some 28 subjects are currently listed and approved by the Minister. The trade committees make recommendations to the Ministry of Education on basic subjects to be included in each training course.

It should again be noted that the subject structure on commercial training courses differs from this and will be examined in Section 3.2.46.

Syllabuses and examinations

3.2.25.

The objectives and scope of the training courses are specified in the executive training orders. These are drawn up by the trade committees and approved by the Ministry of Education. The executive order stipulates what basic subjects, area subjects and special subjects a course is to include. It also determines what levels trainees are to attain within the individual subjects and how assessment is to be carried out.

3.2.26.

The special feature of the Danish system is that basic subjects, area subjects and special subjects alike are syllabus subjects and not timetable subjects. That is to say, the executive training order defines the principles governing the content of the instruction, but the syllabus does not describe the concrete content of the instruction. This is the responsibility of the individual school, with the involvement of the local training committee for the school; in this way the principles of the syllabus subjects are translated into practical instruction.

3.2.27.

Management by objectives means that syllabuses describing the concrete content of training courses are drawn up locally. The primary objectives and framework rules must be met, because they ensure a range of minimum requirements in the training structure and in the vocational qualifications to be gained by trainees. However, the concrete content of the instruction may vary from school to school, likewise the profile of the instruction. Trainees will not necessarily find the names of the syllabus subjects in the timetable, as a number of subjects are often combined.

In addition, it is required that instruction be holistic in its approach, in other words it should seek to integrate school and work experience, so that trainees acquire theoretical knowledge through working with practical problems. In this way the general aspects of a course are mediated in close association with the vocational aspects.

3.2.28.

As a general rule, courses in the technical field conclude with the apprentices' final examination. However, trainees are also continuously assessed throughout their courses in order to ensure that the theory standards aimed for in vocational training are achieved. Thus a requirement of the legislation is that basic vocational training should qualify participants to go on to further training (see Section 3.3.46).

3.2.29.

The performance of trainees is assessed and marks are awarded on a 13-point scale or on some other scale approved by the Minister. The form of assessment varies, depending on the subjects concerned. In some subjects, oral or written examinations are held, sometimes with assignments set centrally. In other subjects, the teacher assesses the trainees' performance and effort in general lessons and awards a mark on that basis.

3.2.30.

Assignments for tests and examinations during the course are set either by the school or the Ministry. Internal and external examiners will normally be teachers at a vocational school, except in the case of the apprentices' final examination, for which external examiners are appointed by the trade committees from trade-related circles. In traditional craft trades, assessment is carried out by inspectors appointed by a special apprentices' examination committee.

The on-the-job training element of vocational training

3.2.31.

As has been noted, vocational training is structured on the principle of alternance training, in which practical training in an enterprise accounts for between half and two thirds of total training time. On-the-job training takes place on the basis of a training contract between the trainee and one or more companies, which have been approved by the relevant trade committee for practical training on the course concerned.

On 1 January 1991, the vocational schools took over the arrangement of on-the-job training places, which had hitherto been the task of the Public Employment Service. At the same time, the rules were elaborated in order to make it easier to conclude combination agreements with several more or less highly specialised companies.

3.2.32.

When the trainee has found a training place, a training contract is concluded between the trainee and the company. The contract covers the entire course — on-the-job training periods, school periods and final examinations, where applicable. The training contract is always concluded in writing and must be presented on a special form approved by the Minister. Trainees who have not attained the age of maturity must have their parents' consent to conclude a training contract. The first three months of the in-company training is always a probationary period. Either party can terminate the contract within this period without notice and without giving a reason for termination. After three months have elapsed, the contract cannot be revoked unless the parties mutually agree to end the contractual relationship. If only one of the parties wishes to terminate the contract, the matter can be brought before the trade committee, which will try to bring about an amicable settlement between the parties in dispute. If it fails to do so, the case can be referred to a Disputes Board. The Disputes Board is appointed by the Minister for Education and consists of a chairman, who must be a judge, and four permanent members, two of whom are appointed on a recommendation from the Danish Employers' Confederation (DA) and two on a recommendation from the Danish Trade Union Confederation (LO). Pay and conditions are regulated by collective agreements, which apply even if none of the parties to the contract is a member of a trade union or employers' association.

Trainee wage levels are shown in the table below.

Table 9. Trainee wages in Denmark, monthly pay, 1997

	First year	Second year	Third year
Technical courses	DKK 5 131	DKK 6 132	DKK 6 907
As % of skilled worker's pay (DKK 21 032)	24.3 %	29.1 %	32.8 %
Commercial courses	DKK 8 216	DKK 9 122	—
As % of skilled worker's pay (DKK 14 719)	55.8 %	61.9 %	—

EUR 1 = DKK 7.4480

SOURCE: THE DANISH INSTITUTE FOR EDUCATIONAL TRAINING OF VOCATIONAL TEACHERS.

3.2.33.
Schools and companies providing practical training are obliged to exchange information, which may benefit the trainee in his training. The trade committees exercise supervision to ensure that trainees receive good, all-round training. There are no formal requirements for instructors providing on-the-job instruction in companies. Practical training within the company takes the form of instruction by the company's master craftsmen and work supervisors.

3.2.34.
Trainees who have concluded a training contract have right of entry to a vocational school in order to complete the theoretical part of alternance training. The school is obliged to ensure that the trainee can complete his training, even if it has decided to withdraw the course in question from its programme. In this case, the school will be responsible for arranging a place for the trainee at another school offering the course at no extra cost to the trainee or to the company providing the practical training. In addition, schools conclude cooperation agreements to ensure that the more specialised parts of courses, in particular, can be offered under conditions that enable instruction to ensure sufficient numbers of students in course groups.

Development in the training place situation

3.2.35.
For a number of years, availability of sufficient practical training places on vocational education and training courses has been a problem. At the end of the 1980s and the start of the 1990s, many young people had difficulty obtaining an on-the-job training place. This was why, in 1990, a political solution was devised under which vocational schools would be able, as an emergency measure, to offer school instruction which would replace practical training in an enterprise either wholly or in part. This arrangement became permanent in 1995.

3.2.36.
Generally speaking, the situation with regard to practical training places can be said to depend on two factors: fluctuations in economic conditions and the size of the trainee population in a given year. There has thus been a significant improvement in the situation through the 1990s, as the economy has grown and annual trainee intakes have decreased. Problems remain in a number of vocational training schemes, however, and there is a residual group who cannot find practical training places because firms do not consider them 'attractive' on account of their age, ethnic origin or educational standard.

3.2.37.
However, it should be noted that the general improvement in the situation regarding practical training places from 1993 to 1997 benefited trainees from a different ethnic background. A study conducted by the Vocational Education and Training Department of the Ministry of Education shows that the number of training contracts concluded for trainees from ethnic minorities rose by approximately 25 % (1995) — compared with a rise of 8 % for Danish trainees. Nevertheless, the study also shows that trainees from certain ethnic minorities still have four times as much difficulty in finding a practical training place as Danish trainees.

3.2.38.
Generally speaking, the trend in the situation as regards practical training places improved through the 1990s. From 1993 to 1996, a rising number of training contracts were concluded (12 %). From 1996 to 1997, however, the number of contracts concluded fell by a total of 17 %. This drop can be explained in part by the reorganisation of the commercial courses. The most recent figures from the Ministry of Education show that the number of training contracts in the period 1 January to 30 September 1998 rose by 11 % over the same period in 1997. In the commercial and technical fields, the number of contracts rose by 6 and 15 % respectively.

Table 10. **Number of ordinary training contracts concluded, 1993–97**

	1993	1994	1995	1996	1997
Commercial courses	15 707	16 828	16 083	15 896	12 150 (1)
Technical courses	18 387	19 906	23 517	22 378	19 314
Total	**34 094**	**36 734**	**39 600**	**38 274**	**31 464**

(1) The noticeable drop in the number of training contracts concluded in the commercial field from 1996 to 1997 is due to the reorganisation of courses geared to commercial and clerical subjects, so that trainees can now choose to take an additional year at school before they embark on their practical training. Most trainees choose this option.

SOURCE: ***MINISTRY OF EDUCATION: ESA STATISTIK NYT, NO 4. 1998. 18 MARCH 1998.***

3.2.39.
From 1993 to 1996, the number of those seeking in-company training places fell (32 %), following which there was a modest increase of a little under 4 % (from 1996 to 1997). This increase was solely attributable to the technical courses.

Table 11. **Number of persons registered as seeking an in-company training place, 1993–97**

	1993	1994	1995	1996	1997
Commercial courses	2 974	2 045	1 544	1 498	1 082
Technical courses	7 542	7 253	6 057	5 652	6 341
Total	**10 516**	**9 298**	**7 601**	**7 150**	**7 423**

SOURCE: ***MINISTRY OF EDUCATION: ESA STATISTIK NYT, NO 4. 1998. 18 MARCH 1998.***

BEST COPY AVAILABLE

3.2.40.

As we have already seen (Section 3.2.35), trainees unable to find an in-company training place can choose to take all or part of their practical training at school. The number of trainees in school practical training fell by 56 % from 1993 to 1995 in the commercial studies field. On the other hand, there was a slight increase of 9 % over the same period in the number of trainees in school practical training at the technical schools. This trend looks likely to continue. The most recent figures from the Ministry of Education show that, from October 1997 to October 1998, there was a drop of 20 % in the number of trainees taking their practical training at school in the commercial field, while the technical field saw an increase of approximately 11 %.

Table 12. Annual intake of trainees in practical training at school, 1993-95

	1993 Intake trainees	1994 Intake trainees	1995 Intake trainees	Changes as % 1995/1993
Commercial schools	909	682	399	– 56 %
Technical schools	2 228	2 782	2 417	9 %
Combined schools	42	51	43	2 %
Total	**3 179**	**3 515**	**2 859**	**– 10 %**

SOURCE: *STUDY OF THE PRACTICAL TRAINING FUNCTION OF VOCATIONAL SCHOOLS — SUMMARY REPORT 1997.*

3.2.41.

From 1992, it became possible for students on vocational training courses to complete all or part of their period of practical training abroad and have this recognised as part of their Danish vocational training. Since 1992, close on 5 000 trainees have completed practical training abroad. See Sections 3.1.21 and 6.6.3.

Table 13. Number of students in the practical training abroad (PiU) scheme, 1992-93

	1992	1993	1994	1995	1996	1997	1998
Company secondment	2	30	167	177	255	250	240
School assignment	14	335	583	702	721	685	674

SOURCE: *ARBEJDSGIVERNES ELEVREFUSION (AER), 1998.*

Assignments abroad under the PiU scheme (*Praktik i Udlandet* — Work Experience Abroad) can be divided into two groups according to whether the placement agency is a company or a school:

- company secondment, in which the trainee has a Danish training contract; the secondment model is used by Danish companies wishing to place a trainee abroad for a period, for example with a subsidiary or subcontractor;
- school assignment, in which the trainee does not have a Danish training contract. The great majority of such trainees are sent abroad by schools, which take on responsibility for a wide range of practical matters in connection with the assignment, for example securing practical training places, preparing students for their assignments, dealing with administrative and legal formalities.

Technical vocational training — some examples

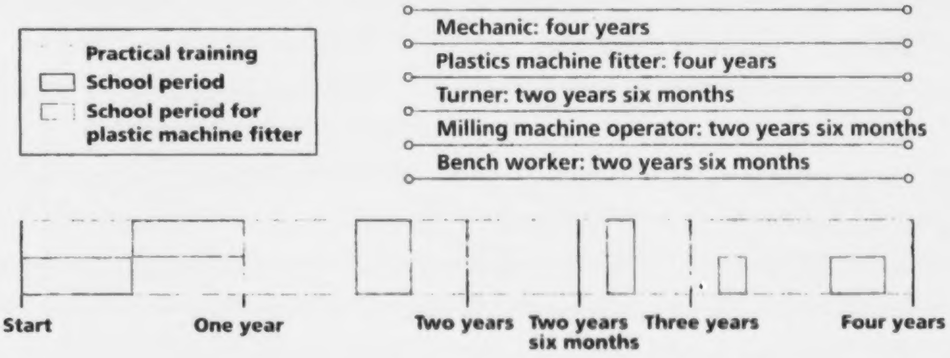
3.2.42.
In practice, there are technical training courses in seven main vocational areas:

- construction and civil engineering;
- graphic industries;
- engineering;
- agriculture;
- land transport;
- food industries;
- service trades.

These sectors comprise several areas of training and employment characterised by a certain uniformity of tasks and functions. For example, the graphic occupations include the following specialisations: bookbinding, silk-screen printing, graphic design, graphic printing, photography, and film, TV and video work.

3.2.43.
To illustrate the structure and duration of training courses, we can look at training in mechanical engineering and the related special subjects. In the figure, the circle represents the duration and distribution of school periods and on-the-job training periods. Each course for an occupational field includes a number of specialisations. If a trainee chooses training in mechanics, five specialisations are possible: mechanic, plastics machine fitter, turner, milling machine operator and bench worker.

Figure 17. **Mechanics course with specialisations**

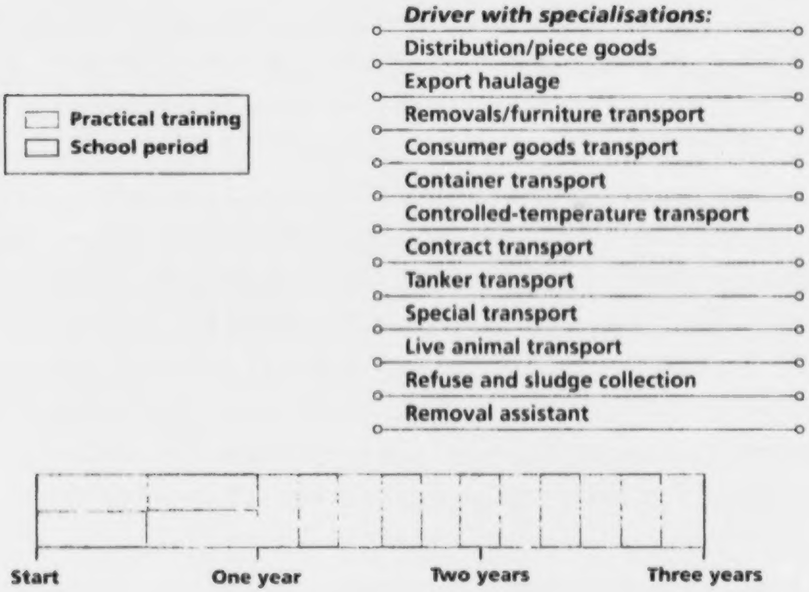


- - - Practical training
☐ School period
⬚ School period for plastic machine fitter
Mechanic: four years
Plastics machine fitter: four years
Turner: two years six months
Milling machine operator: two years six months
Bench worker: two years six months
Start
One year
Two years
Two years six months
Three years
Four years

SOURCE: ERHVERVSUDDANNELSER EFTER 9. OG 10. KLASSE 1995–96, R.U.E., 1995.

3.2.44.
A similar example is driver training. On starting a driver's training course, the trainee can choose between 12 special subject areas.

Figure 18. **Driver training with specialisations**


Practical training
School period
Driver with specialisations:
Distribution/piece goods
Export haulage
Removals/furniture transport
Consumer goods transport
Container transport
Controlled-temperature transport
Contract transport
Tanker transport
Special transport
Live animal transport
Refuse and sludge collection
Removal assistant
Start
One year
Two years
Three years

SOURCE: *ERHVERVSUDDANNELSER EFTER 9. OG 10. KLASSE 1995–6, R.U.E., 1995.*

3.2.45.
Altogether there are 83 vocational training courses in the technical sector. With regard to structure, duration and specialisations, they are similar to the two examples shown. The usual duration is four years and training varies from two years for an industrial worker to five years and six months for an industrial engineer.

Commercial and clerical sector

3.2.46.
In 1996, courses in the commercial and clerical sector were extensively modernised as regards objectives, scope and content.

3.2.47.
With effect from 1 August 1996, training was extended to provide four-year courses. Under the reform, commercial and clerical training became more flexible, with well-defined possibilities for joining and leaving the programme at various stages along the way. There are thus several routes to achieving the same outcome from the courses.

Students from the final classes of primary and lower secondary schools can choose between three different routes of admission:

- the 2 + 2 model, in which students start with a two-year basic commercial education and training (HG) course, with 76 weeks' tuition, followed by two

years of practical training with a training contract. Students who choose the 2+2 model receive State training support (SU) for the first two years and wages thereafter, once they have concluded an on-the-job training contract;
- the 1+3 model, in which the students start with a one-year HG course (38 weeks' tuition) followed by three years of practical training with a training contract. Students who choose the 1+3 model receive SU support for the first year and wages thereafter, once they have concluded an on-the-job training contract;
- the practical training entry route, in which students start directly in an enterprise under a four-year training contract with 55 weeks at school. Trainees who choose the practical training route are paid wages throughout their training.

3.2.48.

The school tuition is divided up into basic subjects, area subjects, optional subjects and special subjects. The weighting between subjects in the commercial and clerical sector is the same as for technical courses (see Section 3.2.22). The executive order on basic subjects for commercial and clerical training provides for a total of seven basic subjects: Danish, English, business economics, IT, sales and service, civic studies and a second foreign language.

3.2.49.

The reform of the commercial and clerical sector called for a change of educational approach at the commercial schools. Amongst other things, there has been a move away from the traditional compartmentalisation of tuition by subjects. The reform gave greater prominence to an integrated approach, interdisciplinary project work and 'firms' offering simulated situations for practical experience (also called 'SIMU' firms). The intention is to enhance the trainees' personal development, i.e. to encourage creativity, ability to work independently and capacity for teamwork. The tuition is thus organised in such a way that these aspects are developed interactively with the subject instruction proper.

3.2.50.

An innovation of the commercial and clerical reform was the introduction of a concluding vocational subject examination. The aim of this is to assess the subject knowledge and general and personal qualifications the trainee has gained within the occupational area in question through a practical and theoretical examination. The commercial and clerical examination should be seen as the equivalent of the final apprentice's examination on the technical courses.

3.2.51.

The commercial and clerical courses consist of three lines of study:

- clerical
- retail trade
- wholesale trade

within which there are a number of special subjects. By way of example, trainees on the clerical courses can choose from among eight special fields:

- administration — the practical period covers two years with 7–11 weeks at school;
- administration with IT (this specialisation has taken the place of the computer

assistant's course) — practical training takes two years with 15 weeks' school tuition;

- public administration — practical training takes two years with 15 weeks' school tuition;
- legal secretary — practical training takes two years with 12 weeks at school;
- forwarding and shipping — practical training takes two years with 10 weeks at school;
- travel — practical training takes two years with 10 weeks at school;
- accountancy and auditing — practical training takes two years with 10 weeks at school;
- general clerical (general clerical studies have replaced the previous all-round clerical training in firms with smaller-scale, more traditional office procedures) — practical training takes three years with 17 weeks' school attendance. Only the general clerical course requires the 1 + 3 model.

Adult vocational education and training

3.2.52.

Adult vocational education and training courses (*voksenerhvervsuddannelser — VEUD*) provide opportunities for adults over the age of 25 to obtain vocational training under special conditions. The aims of these courses and the levels of proficiency attained are the same as for the vocational education and training course provided in the youth education system. Credit is given for formal and informal qualifications acquired in the course of previous education and relevant employment.

In 1996 total activity was assessed at approximately 1 214 full-time equivalent trainees for the year, or approximately 3 670 participants.

3.2.53.

The VEUD option exists, broadly speaking, for all vocational training courses. The transport and commercial and clerical sectors and parts of the food and engineering sectors have proved particularly popular. Many early school-leavers lack the qualifications to go on to vocational training. Special bridging programmes are thus being developed through cooperation between the day folk high schools ((*daghøjskoler*)/adult education centres (VUC)) and the vocational schools.

3.3. Other vocational training courses

Besides the vocational education and training schemes (EUD), which make up 70 % of all basic vocational education (including vocational upper secondary education), there are a number of other vocational training courses with their own legislative frameworks. A short description of those courses is given below.

Agricultural training

3.3.1.

A number of vocational training courses exists for the agricultural sector, provided by the technical schools as normal vocational training, for example agricultural training with specialisations such as agricultural assistant, livestock assistant, fish farm assistant and agricultural machinery operative — all having a duration of three years and eight months.

The actual agricultural training does not take place at the technical schools, but at the 27 schools of agriculture. In January 1991, the schools of agriculture were transferred to the Ministry of Education, and are now vocational schools on the same basis as the technical schools. Agricultural training is not covered by the general provisions on vocational training, but is regulated by a special act (*lov om landbrugsuddannelser*). Like other vocational schools, schools of agriculture are permitted to offer related courses in the agriculture and food sector. The schools of agriculture are covered by the normal grant system for vocational schools. This means that the schools receive a block grant, depending on the total number of trainees, which they may dispose of freely.

3.3.2.
Training as a skilled agricultural worker takes three and a half years and must be completed within a maximum period of eight years. The course takes the form of alternance training and can be accessed through both the practical training and school admission routes. The course can be started directly after the ninth class of primary and lower secondary education. The training has an annual take-up of approximately 1 200 trainees (1995).

3.3.3.
The training differs from other vocational training courses in that there is no obligation to sign a contract for the entire course, there are no contracts for periods of practical training and all trainees are entitled to board and lodging at the school.

3.3.4.
Admission is open to all and there is free choice of school. Tuition is now free of charge. The total level of expenditure on schools and courses is approximately DKK 200 million per year. The annual intake of trainees at schools of agriculture is 4 000, 2 500 on basic courses in agriculture and 1 500 on continuing training courses.

Social welfare and healthcare training

3.3.5.
Basic training in social welfare and healthcare (*social- og sundhedsuddannelser — SOSU*) was introduced on 1 January 1991. Courses are regulated by the act on basic social welfare and health training (*lov om grundlæggende social- og sundhedsuddannelser*). The aim of these courses is to provide staff in social, nursing and care services with broad qualifications. They are generalist courses which replace previously more specialised courses.

3.3.6.
The basic philosophy of the courses is to combine qualifications in pedagogical and social studies and activation techniques with healthcare and nursing qualifications in order to give higher priority to preventive and resource-based modes of working in the social welfare and health sector. The intention of the reform was to secure a high degree of staff flexibility in the face of the readjustment taking place in the social services, nursing and care professions. Staff are trained to have broad-based skills geared to functions rather than institutions.

3.3.7.
Basic social welfare and healthcare training is a system organised in stages:

- the initial year is a one-year introductory stage forming a bridge between primary and lower secondary school and vocational training. The initial year qualifies trainees to continue in social welfare and health training or to continue in the rest of the training system on an equal footing with students completing the 10th class of primary and lower secondary school;
- a one-year basic course of training as a social and healthcare assistant, geared to employment in the social services, nursing and care field of the primary social welfare and health sector;
- a 1½-year continuation course of training as a social and healthcare worker, geared to employment in both primary and secondary areas of the social services, nursing and healthcare sector, at the same time offering the possibility of further study on more advanced social welfare and health courses.

3.3.8.
All three courses consist of practical training and school tuition in a ratio of 2:1. The practical part of the assistant's course takes place within the area of primary municipal provision (home nursing, residential care, integrated schemes), and the practical part of the social and care worker's course takes place in the areas of both primary municipal provision and county provision (ordinary and psychiatric hospitals).

3.3.9.
Students are admitted to SOSU courses through trainee recruitment on the basis of a contract between the recruiting authority and the trainee. The trainee contract gives entitlement to admission to a social welfare and health training school. Hence there is no free admission to the courses, and in some areas there is a problem in finding enough qualified applicants. SOSU courses are in principle open to all who have completed the initial year or the 10th class of primary and lower secondary school.

3.3.10.
Social and healthcare assistants receive pay throughout their training. The pay is fixed by agreement and, in 1997, amounted to approximately DKK 5 500 per month (before tax) for trainees aged under 18 and approximately DKK 7 000 for trainees over 18.

3.3.11.
The tuition part of the training, which is given at one of 34 social welfare and health training schools, consists of compulsory area subjects in the fields of health and nursing care, social studies, educational studies and psychology, culture and occupational therapy. In addition, students can opt for general examination preparation subjects with a reduction in the practical part.

3.3.12.
The practical part of the assistant's course consists of training in practical and personal assistance, rehabilitation and elementary nursing tasks in patients' own homes and in institutions.

3.3.13.
The practical part of the social and care worker's course consists of training in care services, rehabilitation and basic health and nursing care — one third in the primary municipalities and two thirds in the ordinary and psychiatric wards of hospitals under county supervision.

3.3.14.
The number of students admitted to social welfare and healthcare assistants' courses rose from approximately 5 200 in 1991 to approximately 7 100 in 1995. The number of students admitted to social welfare and healthcare workers' courses rose from approximately 1 900 in 1992 to approximately 3 000 in 1995.

Basic vocational training

3.3.15.
The act on basic vocational training (*lov om erhvervsgrunduddannelse — EGU*) took effect on 1 August 1993. This training provision came about as a result of the findings of the Social Reform Commission (*Socialkommissionen*), which sought more flexible training facilities and initiatives for the less academically inclined young people who, for various reasons, did not go on to youth education on leaving primary and lower secondary school and would have liked to do practical work but did not wish or were not qualified to embark on a course of vocationally based youth education.

3.3.16.
EGU is an individually tailored vocationally oriented training scheme with a practical training element provided in private or public enterprises. In terms of occupational fields, a particularly large number of contracts have been concluded in the social welfare and healthcare field and in the food industry. The training can take from one and a half to three years, including 20–40 weeks' school tuition, which may consist of modules from a wide range of school types. The training is arranged by the municipalities or the vocational schools in consultation with the young person, who is assigned to a counsellor throughout the training process.

3.3.17.
The typical EGU trainee is 18 to 19 years old. There is a slight bias in numbers towards males. The educational background of trainees is typically the 9th or 10th class of primary and lower secondary school. About one third have dropped out of a school programme at some point, typically in vocational training. In 1995 there were 1 621 trainees in EGU.

3.3.18.
The intention of EGU is to offer the chance of a job after completion of the training. Another aim is that as many elements of the training as possible can be carried forward as credits to other training schemes, so that the trainee can continue in vocational training with part of it already completed. Hence, the trainee can transfer to an ordinary vocational course.

Vocational education within the upper secondary school system

3.3.19.
In August 1995, new vocational education courses came into being within the upper secondary school system, leading to the higher commercial examination (*Højere Handelseksamen — HHX*) and the higher technical examination (*Højere Teknisk Eksamen — HTX*). Both courses are entirely school-based and conclude with an examination qualifying students either for jobs in business and industry or for further training. Both HHX and HTX take three years, in contrast to the situation before the reform, when they were divided into two blocks: the first year was a

common stream with ordinary vocational education and training and the last two years constituted the actual upper secondary vocational education.

3.3.20.
Both HHX and HTX are similar in many respects to the general upper secondary school, but they nevertheless have their own profile as upper secondary training geared primarily to employment in private enterprise, either directly or by way of further training. With the self-contained three-year course, it has become possible for the vocational schools to compete on a more equal footing with the general upper secondary school and higher preparatory examination (HF) courses for increasingly smaller student intakes.

3.3.21.
In 1995, 6 262 students were admitted to HTX courses, which are now offered at 53 technical schools, while a total of 23 397 began HHX courses, which are offered at all commercial schools.

3.3.22.
The social partners exert an influence on the HHX and HTX schemes, in that the Vocational Training Advisory Council (*Erhvervsuddannelsesrådet*) has set up separate committees for both. These committees advise the Minister on the content and aims of the two upper secondary vocational education courses. The social partners have equal representation on the two committees and, moreover, hold the chairmanship.

Access to further education

3.3.23.
Increasing numbers of young people are passing entrance examinations for further education in the ordinary upper secondary school and the HF, HHX and HTX systems. In 1960, 6.8 % of the class-year passed an entrance examination, while in 1995 the figure was 54 %. One of the reasons for this dramatic increase is that HHX has provided an access route since 1972 and, during the 1980s, generated a considerable increase in course-leavers. With increased admission to HTX courses, an increasing percentage of annual student intakes will have an opportunity to continue studies in the years to come.

3.3.24.
Of those who have taken a vocational education and training course, roughly every seventh goes on to further education at one stage or another. According to the education report (*uddannelsesredegørelsen*) of 1997, about 30 % of technical assistants go on to further training, mainly on advanced technicians' courses in the short further education system (KVU). Close on 20 % of students in the construction and civil engineering field continue their studies, also mainly within the KVU system. Every fifth person who has taken an agricultural course goes on to a medium-length further education course (MVU). Finally, 16 % having taken a commercial vocational training course go on to further study. Among those with training in the road transport sector, very few go on to study at a more advanced level.

3.3.25.
As regards the upper secondary vocational education sector, there are considerable differences between persons who have taken HHX and HTX courses. About 70 % of HTX students choose to continue their studies, usually on a medium-length further

education course, for example as a graduate engineer. A little under 30 % having completed an HHX course choose to continue their training.

3.3.26.
The number of places on further education courses increased considerably between 1993 and 1998. There is free access to most further training courses, i.e. the institutions are free to take qualified applicants within the limits of their available resources and physical capacity. Where there are limitations or selection criteria, supplementary admission requirements are imposed, normally based on examination results, sometimes supplemented by points for vocational experience. The only courses to which there is not free admission are the educational studies or healthcare courses.

3.3.27.
A consequence of the increase in the number of student places is that the number of rejections has fallen from 22 100 in 1991 to 14 400 in 1997. In the same period, the number of applicants has remained relatively stable — 59 400 in 1991 compared with 61 700 in 1997.

Training to combat youth unemployment

3.3.28.
In its concern to combat youth unemployment and offer training leading to a vocational qualification to as many young people as possible, Parliament in 1995 adopted the government's bill for a 'fast-track scheme to get young people into jobs and training' (*Hurtigere i job og uddannelse)*, also known as the 'Youth initiative' (*Ungeindsatsen*). Under this legislation, the 'Training for all' strategy (see Section 2.1.2) was given an added social policy and labour market policy dimension.

3.3.29.
The purpose of the legislation is to eradicate long-term unemployment among young people and to motivate them to take continued training. The innovative element in the act was to make the right to unemployment benefit or cash assistance conditional on the obligation to take up a training offer. If a young person refuses to take a training course for no special reason, he or she forfeits the right to unemployment benefit or cash assistance. Thus the scope for passive reliance on the unemployment benefit or cash assistance system has been drastically limited for young people under 25.

3.3.30.
The legislation is aimed at young unemployed people under 25 without vocational qualifications. Under the act, young people under 25 out of work and entitled to unemployment benefit have the right and obligation to take a training course of at least 18 months' duration if they have been unemployed for six months in any nine-month period. The rules also cover those drawing cash assistance, but the scheme applies to them after only three months' unemployment. The new rules came into force on 1 January 1996.

3.3.31.
Under the scheme, the young people can choose between three training routes (in order of precedence):

- **An ordinary training course**. The young person can start either an ordinary youth education course or a further training course. The young person applies for the course on the same basis as any other applicant, i.e. he or she must meet any admission requirements that may be attached to the course.
- **A training and job qualification programme** (*uddannelses- og jobkvalificerende forløb — UJF*). These programmes are conducted at a vocational school or an AMU centre. The training must be approved by the Employment Service or the municipality which, in consultation with the young person, works out a training plan.
- **Other courses**. As a third possibility, the young person can choose to follow a programme at a production school, a day folk high school (*daghøjskole*) or a 'people's high school' (*folkehøjskole*). This programme must also be approved by the Employment Service or the municipality which, in consultation with the young person, works out a training plan.

3.3.32.

During training, the young person receives one of the following: State training support (SU), trainee wages or an education allowance (ordinary education courses), training compensation, i.e. 50 % of the maximum amount of unemployment benefit (UJF and other schemes), or an employment promotion allowance equivalent to cash assistance (cash assistance recipients).

3.3.33.

When the act was adopted in October 1995, it was expected that there would be approximately 11 000–14 000 young unemployed people in the target group. This figure did not prove correct. The number of young unemployed under 25 has been falling and, in April 1997, a total of 5 800 unemployment benefit recipients were expected to take up a training offer. The group of unemployed cash assistance recipients expected to be brought under these rules was estimated at approximately 3 000.

3.3.34.

The majority of young people expected to take up a training offer have a standard of education corresponding to the 8th, 9th or 10th class of primary and lower secondary school, while approximately 20–25 % have an upper secondary school education.

Training and job qualification programmes

3.3.35.

An amendment to the Vocational Training Act has allowed the vocational schools to offer training and job qualification programmes (*uddannelses- og jobkvalificerende forløb — UJF*) of up to 18 months' duration. The framework for these new programmes is laid down in the executive order for training and job qualification programmes at vocational schools (*bekendtgørelse for uddannelses- og jobkvalificerende forløb på erhvervsskoler*) of 19 March 1996. The purpose of the programmes is, on the one hand, to improve the job prospects of young unemployed people and, on the other hand, to motivate and qualify them for continued training.

3.3.36.

The UJF programmes can contain various elements from both ordinary vocational training and general adult education. In addition, the instruction can contain elements which otherwise enhance participants' employment prospects, for example elements promoting general development and personal development, elements geared to entrepreneurship, elements providing motivation for continued training and elements which are optional for the participant. A requirement of the instruction is that it should be holistic in its approach, so that the participants gain an understanding of the interrelationships involved. It should take practical disciplines as its starting point and parts of the training can be provided as company-based instruction (maximum one third of a programme). A further requirement is that the instruction be adjusted educationally and organisationally to the participants' needs and capabilities.

3.3.37.

The intention of including elements from ordinary vocational training in UJF programmes is to enable the young people to acquire training credits for subsequent use, should they decide to go on to ordinary vocational training. In addition, many of the programmes comprise a practical part. Inclusion of this part has in many cases resulted in either recruitment to a job or conclusion of an ordinary on-the-job training contract.

3.3.38.

In connection with the implementation of the UJF scheme, 13 regional secretariats were set up in 1995 (six for the commercial schools, six for the technical schools and one for the agricultural schools). Furthermore, each individual vocational school has set up a reception service to deal with this new target group.

3.3.39.

In 1996/1997, 4 269 young people embarked on UJF programmes at the vocational schools, two thirds of them at technical schools and one third at commercial schools. The breakdown by sex is even: 2 174 men and 2 095 women. The age distribution, on the other hand, is very uneven — few at the bottom of the age range and most in the 24-year-old group. The 4 269 young people break down as 787 cash assistance recipients and 3 482 unemployment benefit recipients. The proportion of cash assistance recipients embarking on a UJF programme increased steadily from 1996 to 1997. This indicates that the municipalities have begun to use the new facilities at vocational schools to supplement traditional local authority employment promotion measures, such as job-creation projects, production school programmes (see Section 3.3.40), day folk high school programmes, etc.

Production schools

3.3.40.

This type of school was first set up in the 1970s and has been further developed since. The Act on production schools was last amended on 14 June 1996. It states that the function of a production school is to offer combined training and production programmes for young people under 25 without vocational qualifications. The schools' activities embrace both practical work and theoretical instruction. The aim of the schools is to promote participants' personal development and provide them with the means to take a course leading to a qualification or to find a job through the labour market.

3.3.41.
Local or county authorities may take the initiative in setting up production schools, but they must be established as autonomous institutions with a management board made up of representatives of the local authorities and organisations on the local labour market. Altogether, there are 108 production schools in Denmark.

3.3.42.
Production schools aim particularly at young people who need help in making educational and vocational choices within a programme based on practically oriented training. Typical trainee profiles at production schools are: young people with learning difficulties, young people who have dropped out of a youth education course, young people with social problems and those with behaviour problems. The number of participants in production school programmes has remained stable through the 1990s. In 1993, the annual intake was 4 150 full-time equivalents (a total of 12 500 participants) and, in 1996, 4 574.

3.3.43.
The production schools combine instruction and production programmes and produce good school-leaving results. The schools operate under the authority of the Ministry of Education, and their philosophy is based on the old Danish educational tradition from Grundtvig and Kristen Kold. They stand apart from the more traditional employment programmes with no educational activity. In these schools, production is used as a pedagogical instrument to initiate a learning process.

3.3.44.
Specific characteristics of production schools are their great flexibility in curriculum and teaching methods and a close relationship with the market, since the products are sold under market conditions. The instruction is geared to the actual needs of trainees, as revealed through the practical activities. As a result, there are no fixed subjects, although Danish, civic studies and arithmetic are taught in all the schools. Agriculture, horticulture, fish farming, textiles, carpentry and handicraft production are the most common fields of production. Activities are selected in collaboration with local labour market representatives.

3.4. Vocationally-oriented adult training

Introduction

3.4.1.
In this chapter, vocationally-oriented basic training schemes for adults and continuing and upgrading training schemes within the vocational education and training system are discussed. The field of adult education is extensive and lacking in transparency. This presentation will concentrate on adult education with a clear vocationally oriented aim based on legislation from the Ministry of Labour or the Ministry of Education, which is delivered at vocational schools or AMU centres.

Basic, continuing and upgrading training

3.4.2.
Basic vocational training denotes generally recognised training conferring the right to exercise an occupation. The main forms in Denmark are general vocational training and social welfare and health training. Adult vocational training or 'labour

market training' courses (AMU) are also included in part, since they represent basic vocational training for unskilled adult workers who, through such courses, acquire occupational qualifications at a level below skilled worker standard.

Continuing vocational training aims at updating or refreshing knowledge and skills acquired in basic training, including those which later form part of basic training. Some adult vocational training courses also contain aspects of continuing training and must also be considered under this heading.

Upgrading training is training aimed at raising vocational qualifications one level above basic training.

A feature common to all three types of training is that they aim to qualify workers for employment and the pursuit of an occupation. In a period of rapid technological development, the primary role of continuing training is often to provide an introduction to new technologies.

3.4.3.

Adult vocational training courses are not structured as alternance training, but take place exclusively at vocational schools and labour market training (AMU) centres. However, a considerable amount of practical training is often included which is provided in the schools' workshops and laboratories. Generally speaking, vocationally oriented upgrading courses comprise a substantial amount of theoretical instruction, for example basic subjects such as physics, chemistry, mathematics or specialised theoretical subjects in the field of technology and material science. Some upgrading courses are exclusively school-based, whereas others take the form of alternance training (see Section 3.4.47).

The adult and continuing education system

3.4.4.

The adult education system rests on three pillars:

- The general adult education system (*det almene voksenuddannelsessystem — AVU*), the adult education associations (*oplysningsforbund*) and the free evening schools (Ministry of Education)
- Adult vocational training courses or 'labour market training courses' (*arbejdsmarkedsuddannelserne — AMU*) (Ministry of Labour)
- Continuing education/open education (*åben uddannelse*) (Ministry of Education).

Both the Ministry of Labour and the Ministry of Education play key roles in the Danish adult and continuing education system. There are, however, two different types of continuing training, the main difference being that the AMU courses are geared to the needs of business and industry, whereas the focus of courses in the open education system is more on individual needs. The open education system also addresses target groups, which are not covered by AMU courses.

3.4.5.

General adult education (AVU) activities are only given limited coverage here as, to some extent, they fall outside the remit of this monograph. It should be emphasised, however, that it is not possible to gain an understanding of vocationally oriented continuing training in Denmark without some knowledge of the tradition of free adult education (the 'people's high schools', the adult education associations, work on the development of educational techniques and autonomous management at grass roots level), going back over 100 years. It is a tradition which also influenced the adult education work of the labour movement from its beginnings and is carried on by the adult education associations.

3.4.6.

Denmark has developed a tradition of interaction between vocationally oriented continuing training and education leading to general qualifications. This prompted the feeling that a number of new routes should be tested cutting across the three 'pillars' of the continuing education system, and experience has shown that substantial benefits stand to be gained from choosing routes of this kind. Today there is a need for the individual institutions in the multifaceted Danish continuing education system to cooperate in developing and putting together training schemes and courses which simultaneously offer both vocational qualifications and a broader general education with an eye to future prospects, which can be put to use in many different contexts. A sum of DKK 200 million was budgeted in 1993–95 in order to develop such interactive facilities.

3.4.7.

In 1994, there were approximately 100 000 full-year places in the public continuing education system. In the private sector of the course market, the number of full-year places is estimated at 30 000. Currently, about 85 000 employed and 25 000 unemployed full-year students are taking part in continuing training provided in the public sector. Since 1994, some 20 000 new full-year places have been created in the public adult and continuing education system. The government considered it necessary to make such a qualification pledge in order to cope with the move towards globalised competitive conditions, in which production will have to respond to demands of ever increasing technical content and ever shorter product lives. The investment in adult and continuing training is aimed at meeting these challenges. Opportunities for adults to take courses leading to qualifications on a shorter timescale have been improved, through the establishment of better access routes based on interchangeable training credits between the 'pillars'. This would apply, for example, in the case of continuing training courses designed for adults in which a link has now been established between AMU training and vocational training: the trade committee is obliged (when requested) to award merit for AMU training completed, which could be used as training credit on a vocational education course. Other examples would be upgrading training for employment as social welfare and healthcare assistants and social welfare and healthcare workers.

3.4.8.

In Denmark, the public sector plays a prominent role in the financing and provision of continuing vocational training (CVT). The social partners occupy a key position in the supervision of AMU training and the provision of courses. Since the AMU system was launched in 1960, CVT has been viewed as a natural field for State intervention, partly because of the need to sustain competitiveness and partly in order to renew and upgrade qualifications in the labour force. Denmark's transition from an agricultural to an industrial country was thus underpinned by the establishment of the AMU system. The structure of business and industry in Denmark, with few big companies and a large number of small enterprises, also made it expedient for the State to assume the task of promoting CVT. In Danish labour market policy, there has been a common interest in ensuring a high level of vocational qualification in the labour force. The advantage of the AMU system is that it makes for a flexible and mobile labour force, able to switch easily from one company, trade or sector to another.

3.4.9.

Overall, the continuing vocational training effort is shared between the private sector, the Ministry of Labour and the Ministry of Education. Denmark leads internationally both in annual trainee intakes and in the resources the country allocates to adult and continuing education. Nevertheless it is the government's view that we must do even more. The question is: how much more training should be provided, who should be trained, and why? And, not least, how is it to be financed?

3.4.10.

In contrast to most other European countries, the contribution of the private sector in the CVT field is relatively modest in Denmark. This is due in no small measure to the very considerable public provision of continuing training aimed at unskilled and skilled workers. There is considerable uncertainty with regard to the extent of training activities in the private sector. In 1997, *Danmarks Statistik* began to produce statistics on the training activities of private course providers, based on questionnaires sent to various groups of private providers. The aim is to put together a complete countrywide picture of the development of adult and continuing training in the hands of both public and private providers. The statistics, which cover revenue-funded activity on the part of both public and private providers, relate to training activities pursued without State regulation and financing. It is worth noting that the available statistics estimate the private contribution at only approximately 8 000 trainees per year. An assessment produced by the Danish Technological Institute in connection with the quadripartite report in 1994 put the extent of the private contribution at approximately 33 000 trainees per year. The difference can be explained, essentially, by the fact that the figures from *Danmarks Statistik* do not include the very extensive training activity conducted internally by private firms.

3.4.11.

The public vocationally oriented adult training schemes will be presented as follows:

- adult vocational training courses (AMU) (Section 3.4.12);
- training facilities for the unemployed (Section 3.4.35);
- vocationally oriented further education (Section 3.4.47);
- Open Education Act (Section 3.4.60).

Adult vocational training courses

3.4.12.

AMU activities form a very important part of the public CVT effort. The aim of adult vocational training, or labour market training (AMU), is, by way of publicly financed continuing training, to qualify workers to meet the current needs of the labour market. The AMU system forms the backbone of continuing vocational training for adult workers in Denmark. It carries the main share of responsibility for ensuring that a substantial proportion of the employed and unemployed population on the labour market are able to keep abreast of technological and social development. It is the needs and capacities of the labour market, companies and individuals that determine what AMU courses are required. They are provided at AMU centres and vocational schools spread across the country and are based on a close interaction between the State and the social partners. The vocational schools are just as important as the AMU centres as providers of AMU courses. In addition to the AMU centres and vocational schools, firms and training institutes can also be approved in certain specific cases for the provision of adult vocational training courses.

3.4.13.

Some far-reaching changes have taken place in the AMU system over the past years. In 1994, the 'active labour market policy' was launched with fundamental changes in the work and management of the Public Employment Service (AF) and the AMU system. This continued in 1995 in conjunction with the government's legislative programme for fast-track access to jobs and working life (*Hurtigere i job og arbejde*), which brought many changes to the AMU system starting in January 1997.

3.4.14.

AMU courses have existed since 1960, when they were set up in response to the shortage of qualified labour, which arose at the end of the 1950s and worsened through the boom period of the 1960s. The main task of the AMU system was thus originally to 'transfer' manpower regionally (from country to town), sectorally (from agriculture mainly to building and civil engineering and the metal industries) and vocationally (from craft trades to industrial mass production). In addition to this manpower qualification function, the AMU system took on the task of maintaining and developing qualifications already acquired in the labour force.

3.4.15.

In the 1990s, labour market policy intentions have concentrated on ways of combining the routine upgrading of qualifications in the employed section of the labour force with initiatives designed to get unemployed people back into working life. The new laws on adult vocational training courses and AMU centres came into force in January 1994. The new legislation enabled the AMU system to step up its contribution to upgrading qualifications in the labour force. The opportunity to organise flexible training facilities cutting across the existing boundaries between skilled and unskilled workers constitutes a significant change. The result of this is that more courses yield benefits at the workplace in terms of interchangeability between groups of employees.

3.4.16.

AMU courses are regulated by the 1993 Adult Vocational Training *Act* (*lov om arbejdsmarkedsuddannelser*), as amended by Act 1061 of 20 December 1995. They are developed and implemented as adult and continuing vocational training courses and as a means of providing qualifications for unskilled workers and persons having undergone some vocational education. According to Section 1, the purpose of the act is:

- to maintain, extend and improve the vocational qualifications of the labour force in accordance with the needs of the labour market;
- to ease restructuring and readjustment problems on the labour market in the shorter term; and
- to contribute to an overall raising of qualification levels on the labour market in the longer term.

3.4.17.

The target group for AMU training courses comprises unskilled workers, skilled workers, technicians and laboratory assistants and includes both public and private sector employees, foremen and the self-employed. They are also open to holders of diplomas in business studies (*merkonom*), technical studies (*teknonom*) and computer studies (*datanom*). The courses are open to persons aged 20 and over. The courses are aimed primarily at employed workers but unemployed persons can also take advantage of them.

3.4.18.

The AMU target groups can be specified as:

- employees;
- self-employed business people with the same education as their employees (skilled and unskilled);
- employees whose jobs are threatened;
- unemployed persons.

A special feature of the system is that the public input is targeted not only at the poorly qualified, including persons out of work, but also at employed semi-skilled workers in particular and at skilled workers, technicians and foremen. Up to 30 % of participants in AMU courses are unemployed persons taking ordinary courses alongside employed workers.

3.4.19.

Since 1 January 1997, admission to AMU courses has been open to all, i.e. the individual training establishment can decide the number of course participants for itself. It can accept all applicants in the target group for the course in question whom it deems qualified to take the course.

3.4.20.

It must be emphasised that the scope for the individual to progress through all the modules in the programme for a given trade or industry and achieve 'complete' training normally depends on what is considered reasonable after consultation with the employer. Clearly, however, there is room for manoeuvre in terms of the individual needs of the employees as well. Since 1991, there has been an agreed basis for continuing training geared to local training plans in the individual enterprises.

3.4.21.

From 1996, all AMU centres have been autonomous institutions with approved statutes and with overall responsibility vested in a management board. Training takes place at a day school and is free of charge. It can be followed by anyone over 20 who already has or seeks employment in the field of work in question. Some courses are held at residential schools, where board and lodging are provided for trainees who live some distance away.

3.4.22.

Course participants at a day school normally receive compensation for loss of earnings. The compensation corresponds to unemployment benefit from the State-approved unemployment fund of which the person concerned is or could have been a member. The maximum amount of unemployment benefit is 90 % of pay, but with a ceiling of DKK 538 (EUR 72) per day. The compensation is paid to employed wage-earners and to unemployed persons. In addition, a travel allowance may be paid to course participants. AMU activities, including the operating expenses of the AMU centres, are financed from the Employment Promotion Fund (see Section 4.2.18), contributions to which are levied as a percentage of gross wages (in 1998, 8 %).

3.4.23.

AMU centres have been given greater freedom with regard to their course provision, and greater consistency has been established between AMU courses and vocational training. The local cooperation between the AMU centres and other schools, such as vocational schools, adult education centres and the like, is formalised on the lines of a local joint cooperation forum, which will meet at least once a quarter.

3.4.24.

Currently, there is increased competition on the supply side between the AMU centres and the vocational schools as regards CVT, but also in the field of vocational education and training (EUD) and adult vocational education and training (VEUD). CVT provision, as an element in the very wide-ranging labour market reforms of 1994 and 1995, has become more customer-oriented, demand-led and decentralised.

The AMU training programmes

3.4.25.

AMU training courses consist of both workshop instruction and theory and can provide vocational, general-vocational and personal qualifications. The courses are described in a training plan (setting out the aims and scope). The individual training establishment is free to flesh out the content of the training plan so that the instruction conforms to the needs of the local labour market and the participants.

3.4.26.

The courses are held mainly at AMU centres and vocational schools. The modular structure of the training (normally of one to six weeks' duration) offers the possibility of adapting course provision flexibly to local business and labour market conditions and gives the individual course participant an opportunity to take a course that exactly matches his or her needs and capabilities in terms of training and employment. When a course has been completed with satisfactory results, a certificate of proficiency is awarded. Each course confers its own individual standard of proficiency and usually forms part of a modular structure which offers a progressively rising level of proficiency and can also provide training credit valid for other forms of vocational training.

AMU courses can be divided into a number of main groups.

AMU courses conferring vocational qualifications

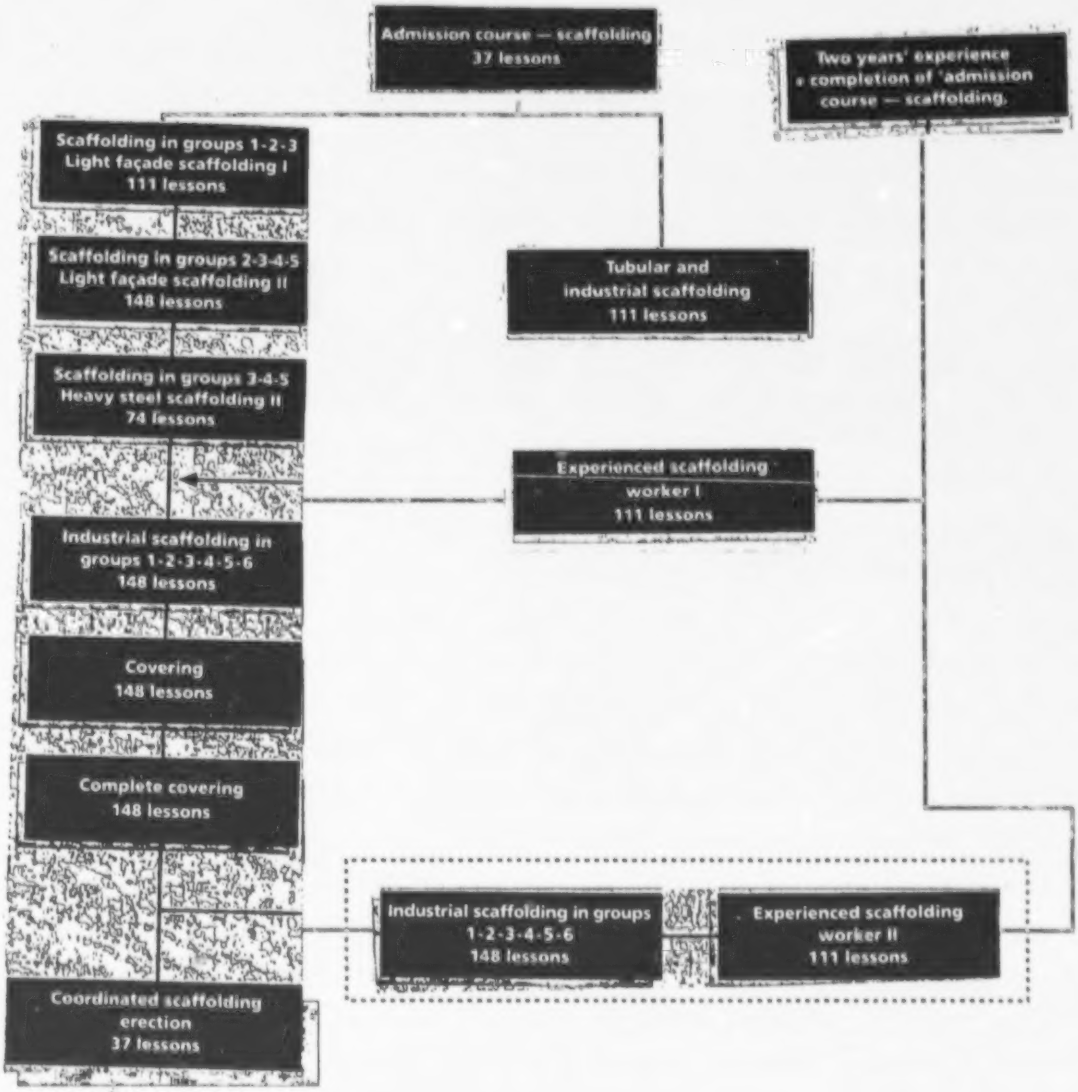
3.4.27.

The mainstay of the labour market training system is the 2 300 or so training plans within 55 trades and occupations. These 'plan courses' make up the core programme. The training plans are developed by some 50 continuing training committees or by the National Labour Market Authority (AMS) and approved by the Training Council, so that they have countrywide validity as qualifications. The training plans are continuously reviewed, so that they correspond to the current needs of the labour market. The courses consist of modules, which can be put together into a qualification-raising system.

3.4.28.

As an example of the modular course structure, courses for scaffolders in the building and civil engineering industry are illustrated below.

Figure 19. **Courses for scaffolders**


Admission course — scaffolding
37 lessons
Two years' experience + completion of 'admission course — scaffolding.
Scaffolding in groups 1-2-3
Light façade scaffolding I
111 lessons
Scaffolding in groups 2-3-4-5
Light façade scaffolding II
148 lessons
Tubular and industrial scaffolding
111 lessons
Scaffolding in groups 3-4-5
Heavy steel scaffolding II
74 lessons
Experienced scaffolding worker I
111 lessons
Industrial scaffolding in groups 1-2-3-4-5-6
148 lessons
Covering
148 lessons
Complete covering
148 lessons
Industrial scaffolding in groups 1-2-3-4-5-6
148 lessons
Experienced scaffolding worker II
111 lessons
Coordinated scaffolding erection
37 lessons

SOURCE: NATIONAL UNION OF GENERAL WORKERS (SID) TRAINING DEPARTMENT, 1998.

3.4.29.
AMU qualifying courses are primarily intended for employed workers, but unemployed persons can also take part. In 1995, approximately 290 000 persons took a qualifying course of shorter or longer duration. Of these, approximately 75 % had jobs.

Table 14. **Number of participants starting qualifying courses, 1991-95**

1991	1992	1993	1994	1995
172 996	200 878	241 337	273 914	290 288

SOURCE: NATIONAL LABOUR MARKET AUTHORITY: STATISTICS 1995.

AMU qualifying courses are organised as relatively short and intensive training courses of up to six weeks' duration. The courses usually form part of a training structure, a qualification-raising system, in which the individual can acquire a rising level of vocational proficiency by completing several individual courses. Within a range of occupational areas, completion of an entire series of courses enables unskilled participants to gain vocational recognition, sit the final apprentice's examination or acquire credit for subsequent vocational training.

The courses can be arranged flexibly, i.e. in the form of continuous full-time instruction during daytime hours, as part-time instruction or in the form of evening classes, etc. In this way, the training establishment can adapt the practical arrangement of the training to specific needs.

Combined training programmes

3.4.30.
Among the wide-ranging changes in the AMU system from 1997 is the provision of a new programme, combined training programmes (*sammenhængende uddannelsesforløb*), which comprise several different types of AMU vocational training. Combined training programmes are training measures of longer duration targeted at persons in employment, unemployed persons or refugees/immigrants. They comprise both ordinary combined training programmes (intended primarily for employed persons) and specially designed training programmes targeted mainly at the unemployed. The programmes consist mainly of AMU qualifying courses, but may also include other training components, for example elements from general adult education (AVU) or higher preparatory examination courses (HF), literacy courses or individual supplementary instruction. The combined training programmes for unemployed persons and refugees/immigrants may contain periods of work experience, and courses can be extended beyond the normal duration.

3.4.31.
Combined training courses can be developed centrally by continuing training committees; in that case, they confer a standard of proficiency recognised throughout the country. It may be decided in advance that participants can be credited for training in an AMU programme, if they go on to take a vocational training course (standard merit).

At the same time, it is possible for AMU centres and vocational schools, on a decentralised basis, to put together the programmes themselves in order to meet needs on the local labour market. In this case, the course participants only qualify in respect of each subject-based AMU course forming part of the programme. The programmes consist of AMU courses, other training (e.g. AVU) and, in specially devised programmes, also practical work.

Individual skills assessment

3.4.32.

As part of the active labour market policy, the principles governing AMU action in favour of the unemployed were altered in 1995. The previous vocational induction courses were abolished. In their place, the AMU system is focusing on an entirely new activity: individual skills assessment (*individuel kompetenceafklaring*). Skills assessment programmes are primarily, but not exclusively, intended for the unemployed. The aim is to promote and strengthen an assessment by the individual participant of his or her own needs and capabilities with regard to continued training. The individual skills assessment course normally takes one to three weeks, depending on the participants' particular circumstances. Individual skills assessment is provided by the training establishment in accordance with rules laid down centrally.

Enterprise-adapted training

3.4.33.

The purpose of enterprise-adapted courses (*virksomhedstilpasset arbejdsmarkedsuddannelse — VTP*) is to meet special vocational training needs in individual enterprises, with a view to enhancing the qualifications of persons employed or assured of a job in the enterprise within the field covered by the training. VTP covers a training need in firms, which is not covered in full by AMU qualifying courses or combined training programmes. The enterprise itself pays for part of the training, and the participants receive reduced training allowances. The courses must cover between half and two thirds of an approved qualifying training plan or a centrally approved combined training programme. VTP courses are provided and developed by the training establishment in accordance with rules laid down centrally.

Courses developed locally

3.4.34.

AMU centres may themselves also develop and provide training measures and activities motivated by labour market needs, which the individual centre may sell as 'revenue-funded activity' (*indtægtsdækket virksomhed — IDV*) to enterprises, etc. Finally, in association with training courses, the centres offer a range of training activities to enterprises and other users, such as advice and guidance on company training needs, 'tailor-made' training courses for firms, the Public Employment Service, etc., and rotation projects.

Training provision for the unemployed

3.4.35.

In 1995, the principles of action in favour of the unemployed were altered. The change of course means an upgrading of priority for qualifying courses aimed at unemployed persons, in terms of quality, coordination and scope.

3.4.36.
In October 1995, the Danish Government presented a national employment programme (*Danmarks beskæftigelsesprogram)*, which describes the main points of the active labour market policy. A key element in this gives a further boost to action on training and upgrading of qualifications. The aims are:

- to get unemployment benefit recipients into work-related activity, i.e. work experience projects or vocational training, after a maximum of one year,
- to ensure that all unemployment benefit recipients under 25 without a qualification have a job or are undergoing training after a maximum of six months' unemployment,
- to ensure that all on the labour market — both insured and uninsured — have the opportunity to pursue adult or continuing training, so that they can keep their place on the labour market and provide well qualified labour for enterprises. This publicly financed action is geared in particular to those with the lowest levels of education and training.

3.4.37.
The individual action plan forms the starting point for the action to combat unemployment. This is followed up by a range of instruments to get people into work or training, in which priority for the training component has been substantially increased — from 34 % in 1994 to 55 % in 1995. The various tools have been found to have different effects with regard to returning people to the labour market. Work experience projects have proved to be more effective than vocational training proper. Experience has shown that private work experience projects are the best tool for getting unemployed persons back onto the labour market.

3.4.38.
The reform introducing the active labour market policy, which took effect in January 1994, amongst other things, reflects a regionalisation of labour market policy and the establishment of certain framework rules designed to strengthen social dialogue both regionally and centrally. One of the more important elements is the establishment of regional labour market councils (*regionale arbejdsmarkedsråd — RAR*). It is the 14 regional labour market councils that decide what measures are to be applied. The councils consist of representatives of the social partners and the municipalities and counties and have the task of organising labour market action. The decentralised decision-making process helps to increase the flexibility of the action, which accordingly does not necessarily take an identical form from one region to another.

3.4.39.
As has already been pointed out, the tools designed to get people back into the labour market changed with the implementation of the active labour market policy. The choice of tools depends on the priorities of the regional labour market councils, the needs of the regional labour market and the aspirations and capabilities of the unemployed individual. Against that background, an individual action plan (*individuel handlingsplan*) is drawn up, containing one or more activities designed to help the unemployed person into work or training. In 1997, 187169 initial registration interviews and 52 765 guidance interviews took place, resulting in the adoption of 134 229 action plans. In 1997, 112 000 programmes to get individuals

back to work were commenced, approximately 20 % fewer than in 1996. This drop is due primarily to the steep fall in unemployment. Studies from the National Labour Market Authority (AMS) show that up to half of all the people involved were either in unsubsidised employment or undergoing an ordinary training course half a year after the conclusion of the programme (1997).

3.4.40.

The work on individual action plans for unemployed persons has increasingly concentrated on concrete job openings on the labour market in conjunction with leave arrangements, job changes and job rotation. The high priority given to the training effort in 1995 was due in particular to rising employment — when employment expands, the need to match the demand for qualified labour also increases. The use of job rotation projects (see Section 3.4.43) also introduces a cohesive element into the action by the recruitment of unemployed persons to fill in for employed workers upgrading their training.

3.4.41.

In Denmark, unemployed persons are eligible to take part in ordinary training projects, such as AMU courses, on an equal footing with employed workers. Out-of-work individuals are only accepted on courses, however, if there is a place, since persons employed in a given field or people with job prospects are given preference. In addition, there are a number of special training projects for unemployed persons who lack the relevant qualifications. For young people between the ages of 18 and 30 with particular adjustment problems, for example, there are the AMU work experience courses (*træningsskolens arbejdsmarkedsuddannelser — TAMU*), to mention only one among many facilities available.

3.4.42.

A special effort is made to help refugees/immigrants. Courses for these groups are aimed at integrating refugees and immigrants into Danish society through an introduction to one or more occupational areas. Work is also done to improve the participants' knowledge of Danish. The courses are held at AMU centres.

Job rotation

3.4.43.

Leave schemes became very popular in 1994 and 1995. In 1995, the number of whole-year persons on leave totalled 77 000. This number fell to 49 000 in the second quarter of 1997, and it continues to fall. In 1997, 35 000 persons were given training leave, while 23 000 were allowed parental leave. Numbers on sabbatical leave fell from 6 000 in 1995 to 1 000 in 1997. Unemployed persons are entitled to leave in the same way as everyone else (but remain available to the labour market) and account for about half of all persons on parental and training leave, respectively. This reduction is due mainly to the lower compensation terms available to persons on leave. The government has tightened up the terms available several times, because the schemes became too popular, hence too expensive. At the same time, the demand for labour has increased in recent years, owing to the improved economic situation.

3.4.44.

Perhaps the most important action in favour of those poorly placed on the labour market, including the long-term unemployed, is to improve their qualifications and to generate greater circulation on the labour market. This is why the leave reform, in combination with job rotation models, occupies a key position in labour market policy measures for the unemployed as a whole. The leave schemes from 1994 represent one of the most important innovations in Danish labour market policy in recent years. The reform represents a shift from action focused on the unemployed to action targeted in the first instance at persons in employment. Offering persons in jobs an opportunity to take leave creates job openings which make it easier for the unemployed to get a foothold on the labour market. Hence the leave schemes constitute a kind of 'pull strategy', by which the unemployed are drawn into enterprises, rather than a 'push strategy' targeted directly at the unemployed and aimed, by means of training and other activation measures, at pushing them into work-related activity.

3.4.45.
Job rotation is a uniquely Danish initiative, which sets up an interaction between training and labour market policy. It means that one or more unemployed persons, possibly after taking part in a course or work experience programme as preparation for the job, fills in for an employee who is taking part in a qualification upgrading programme. Hence job rotation simultaneously benefits several actors on the labour market: companies are able to upgrade the qualifications of their core workforce without any reduction in staffing levels and at the same time make contact with potential jobseekers. The employees improve their qualifications through participation in a CVT programme. The unemployed individuals get job experience as replacement manpower, thereby in some way getting their foot in the door of the company. Use of job rotation projects is increasing. The number of participants in 1994 was approximately 17 800 persons, in 1995 approximately 29 000 (of whom 8 000 unemployed) and in 1996 approximately 36 500, but the number of participants fell steeply in 1997 to 19 000. Training both employed and unemployed persons for new tasks at the right time results in a convenient and flexible outcome for enterprises.

3.4.46.
Job rotation schemes are particularly attractive to small businesses. Employees of companies in the private sector account for more than three quarters of all participants. Job rotation is financed in a variety of ways by using existing arrangements, e.g. resources to get people back to work from the regional labour market councils, training leave, adult training support (VUS), ordinary places in the CVT system, other support schemes and EU funds (the Social Fund: Objectives 3 and 4 and ADAPT).

Vocationally oriented further education

3.4.47.
The vocationally oriented further education schemes are described here in the following categories:

- further technical training (Section 3.4.51);
- further commercial training (Section 3.4.53);
- further technical/commercial training (Section 3.4.59);
- Open Education Act (Section 3.4.60);
- part-time qualifying courses (Section 3.4.66).

3.4.48.
In addition, there are a number of possibilities for further training in higher education establishments and universities, but a description of these would go beyond the scope of this monograph. This presentation confines itself to further training administered by the Vocational Training Department (*afdelingen for erhvervsfaglige uddannelser — EFU*) of the Ministry of Education.

3.4.49.
In December 1997, a new act on short further education courses (*lov om korte videregående uddannelser — KVU*) was adopted. This act has only just taken effect (August 1998), so only some of the main points will be mentioned here.

The overriding aim of the KVU reform is to make courses more uniform and attractive with regard to admission, duration, purpose, provision, advice and further training. In future there will be three routes of access to a short further education course (KVU). The first is based on vocational education and training without direct access for students with an upper secondary education. The second is based on upper secondary school courses without direct access for students with a vocational education. The third has students from the vocational education stream as its main target group, but is also open to those from the upper secondary school stream. The relevant occupational supplement is integrated into the introductory studies stage.

3.4.50.
A KVU course will normally take two years. The intention is that it should be easier to go on from a KVU course to a medium-length (MVU) or long (LVU) further education course. The current number of over 80 courses will be reduced to about 40. The many vocational academies will be affected in particular, as regards course content and numbers. The advisory structure will be strengthened, and a combined KVU Council, the Vocational Academy Council, and a number of advisory committees have been set up. The Vocational Academy Council has taken over from the Technicians' Council. Nine advisory committees have been set up for occupational and interdisciplinary training areas by the employers' and employees' organisations within the field covered by the courses.

Further technical training

3.4.51.
Further technical training is provided at technical schools and is geared to jobs requiring operational, planning and design skills. The courses are designed to follow on from vocational education. The instruction is theoretical for the most part and takes as its starting point knowledge acquired by a skilled worker. Instruction is arranged in such a way as to ensure that general subjects (mathematics, physics, languages, etc.) are related closely to the specialised topics, since emphasis is placed on practical application rather than pure theory. Training is given at a vocational school and is usually of one to two years' duration. The courses usually culminate in a State-supervised examination and certificates are awarded. There are currently 17 different further technical training courses.

3.4.52.
Further technical training, targeted at raising the qualifications of already well qualified workers, caters for just under 4 500 students a year (1996). Set against the demand for qualification upgrading, the existing capacity of further training

schemes must be considered insufficient to meet the need for continuing/further training. There are therefore plans for a continued increase in the number of places in the coming years.

Further commercial training

3.4.53.
Few actual further education courses have been set up within the commercial and clerical sector.

3.4.54.
The computer technician (*datamatiker*) course is a short, vocationally oriented computer science-training course, which lasts two and a half years and takes place entirely at school. The course is divided into five semesters, with a particular main topic for each semester. After the first four semesters, an oral examination is held on the subjects for the period. During the fifth semester, an examination project is prepared and defended orally. Admission to such a course is via one of the four upper secondary school youth education courses, and the course culminates in the award of a certificate. The computer technician training is very broad, but enables the trainee to continue further studies in one or more specialised areas. The vocational aim is achieved by confronting the student with practical problems of increasing complexity. The aim is to provide students with problem-solving skills and to enable them to discover theories and methods for solving problems. In 1996, a total of 2 224 students commenced the computer technician course.

3.4.55.
The market economist course was set up in 1990 as an internationally oriented further training course at commercial schools. The course is of two years' duration and the entry requirement is successful completion of one of the four upper secondary youth education programmes.

3.4.56.
The aim of the course is to provide employment in private sector companies engaged in international business in the broader sense, i.e. companies involved in manufacturing, commerce, services, finance, etc. Through the course, the student should acquire occupational qualifications at a level such as to enable him/her to participate in the operational marketing and market adaptation of products and services.

3.4.57.
Subjects taught include foreign languages and culture, international marketing and international economics. Instruction is also given in business economics, organisation of production, business law, administrative systems and statistics. In 1996, a total of 1 361 students were admitted to the 38 commercial schools offering the course. The market economist course is seen as a response to the rising demand for qualifications due to the pressure on firms from increasing international trade.

3.4.58.
The business academy course is a short further education course, set up on local initiative through cooperation between the local commercial school and the business community. The courses vary in content but are structured on common guidelines and confer a standard of proficiency qualifying students completing

them for unsupervised employment in commercial and administrative functions in business. The entry requirements are the higher commercial examination (HHX), basic vocational education and training in the commercial and clerical field or equivalent training. The courses typically last two years and are organised as alternance training, half the time normally being spent at a school and half in the form of practical training in one or more companies, with which the student concludes a contract. A salary is paid during the practical part of the training. When the course is completed, a statement is issued signed by the company and the student regarding the practical part of the training. The school tuition is provided at a commercial school and concludes with a State-supervised examination. There are currently 13 different business academy training courses.

Further technical/commercial training

3.4.59.
Further technical/commercial training courses are provided on the basis of cooperation between the technical schools and the commercial schools. The intention of these combined courses is to provide both technical and commercial qualifications. For the moment, the only course in existence is one for technical export staff, but several are expected to be set up. To be admitted to the course, a student must have completed one of the four upper secondary education courses. The training concludes with a main assignment, and an examination certificate is awarded. The course takes four years and alternates between school tuition and practical training. The course consists of eight stages, each covering half a year, half is completed at school and half in a practical placement with an export-oriented company.

Open Education Act

3.4.60.
The Open Education Act (*lov om åben uddannelse*) (1993, amended in 1994) is of special importance to the Ministry of Education. It combines the areas covered by previous legislation on continuing training and takes account of new possibilities for supply and demand. The purpose of the act is to promote the supply of a broad range of vocationally oriented training facilities to the adult population. In the organisation of such facilities, consideration must be given to the practicalities of adults combining training with involvement in the labour market.

3.4.61.
Open education covers all further training and higher education within the jurisdiction of the Ministry of Education, apart from primary and lower secondary education, the higher preparatory examination (HF) and upper secondary school. The act covers vocationally oriented training activities within the jurisdiction of the Ministry of Education, i.e. in respect of which the Ministry of Education has issued rules. Training establishments have freedom to offer and receive grants for open education within the entire subject area of the education, which the establishment already has official approval to provide. The fact that open education is being provided must be publicly announced.

3.4.62.
In supply terms, the AMU centres are now on an equal footing with institutions under the authority of the Ministry of Education which are approved for the provision of vocationally oriented training as far as short courses are concerned. If

an AMU centre is already approved for the provision of vocational training, the centre may freely offer as open education all courses for which the centre has approval on a full-time basis, as well as individual subjects from those courses.

3.4.63.
The institutions can offer training activities as full-time courses up to one year, part-time courses, full-time courses arranged on a part-time basis, individual subjects and short courses. The institutions can themselves choose whether to offer open education and receive 'taxi-meter' grants for all paying participants; the 'taxi-meter' rates are laid down in the government's annual budget.

3.4.64.
The Danish version of open education is seen as unique in Europe — it now covers everything apart from primary and lower secondary education, the higher preparatory examination (HF) and upper secondary education. All further training and higher education activities within the jurisdiction of the Ministry of Education are covered. Open education consists partly of special vocational training activities arranged for adults and partly of special organisational forms of ordinary vocational education and training. The principle is that students only need to take the tuition for which they have a need or the inclination. It is fundamental to open education that no training support can be paid to participants, who must themselves pay up to 50 % of the training costs by way of participant contributions. There is no admission limit in this system, in contrast to ordinary higher education. The training provision can be combined with full-time employment, so new, more flexible forms of provision have been created, including evening/weekend/summer schools and to some extent also distance learning.

3.4.65.
In 1996, the budget for open education was DKK 700 million, and approximately 280 000 persons took part in courses, corresponding to an annual full-time equivalent intake of 28 000 students. There was particularly rapid growth in short courses at the vocational schools, while there was a drop in part-time courses (this applies in particular to the business studies (*merkonom*) courses which, at 41 000 participants, account for by far the largest group).

Part-time qualifying courses

3.4.66.
A range of short further education courses have been set up at the vocational schools, aimed at adults and organised as part-time courses lasting one to three years. They have become very popular, especially as further training for persons who, after completing vocational education and training, have acquired a certain amount of vocational experience. These courses are provided and financed mainly from the public purse, and a fixed participation fee is charged, often paid by the employer. The training includes the *merkonom*, *teknonom* and *datanom* courses. The courses are usually provided in the form of evening classes. They are regulated by the Open Education Act (see Section 3.4.60).

3.4.67.
Merkonom and *datanom* courses are offered at commercial schools; there are certain common subjects, after which the courses are split into different areas. In each area, a choice can be made between various special subjects. The approach is

extensively based on study group work, which takes particular account of the fact that the training is followed by adults. A written, State-supervised examination is held in the common and specialised subjects at the end of the course. The curriculum of these training courses includes subjects such as business economics, company organisation; management and cooperation, accountancy, languages for business, data processing, etc.

Quantitatively, continuing training activity in this area is dominated by the commercial and administrative sector, which accounts for some 90 %. In 1996, there were some 41 000 trainees undergoing *merkonom* training and 2 000 being trained in the *datanom* branch.

3.4.68.
The *teknonom* course is offered at technical schools and concludes with a State-supervised examination. The purpose of the course is to qualify students to assume more senior functions in their business. The course gives participants an opportunity to acquire knowledge and skills in particular areas and, at the same time, to achieve all-round proficiency in the field covered. In 1996, there was a total of some 2 700 participants in *teknonom* courses. These are structured on a 'building block' system, combining common courses, i.e. business economics and company organisation, with the various special-subject courses. The latter may be taken individually or in combination, as the participant chooses.

3.4.69.
The *merkonom, datanom* and *teknonom* courses have been highly successful in the Danish further education system. The number of participants has been increasing over recent years, and these evening class courses are extensively used by participants with training backgrounds other than basic vocational education. The courses are held in high esteem by employers and are considered a flexible instrument for upgrading qualifications and for the further training of the workforce.

Chapter 4
Management and financing

4.1. Management and administration

In Section 4.1, we take a closer look at the management and administration of the vocational education and training system (EUD) and adult vocational training schemes (AMU). In Section 4.2, we focus attention on their funding.

Management and administration of EUD and AMU training schemes

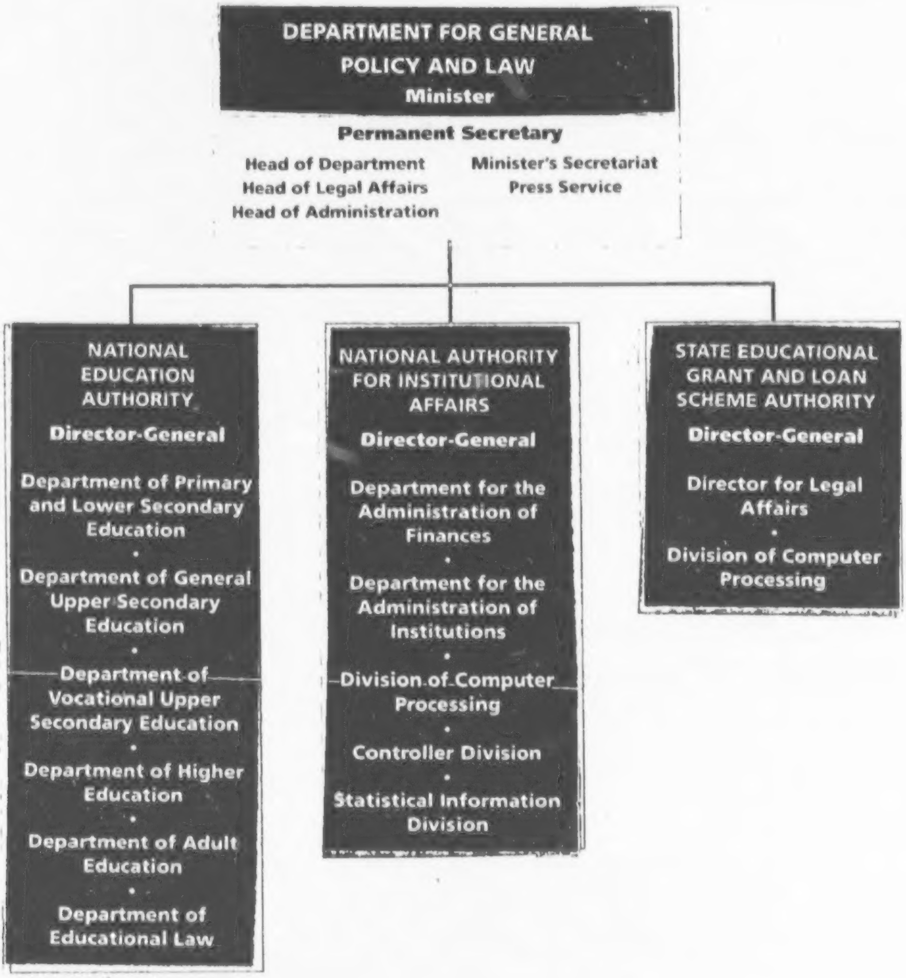
4.1.1.
As can be seen from the presentation in Chapter 3, the vocational training system in Denmark has a very broad spectrum and falls under the responsibility of two ministries and a number of managing bodies. This section will examine in outline some new management philosophies common to them all. These regulatory mechanisms can be summed up under the keywords 'decentralisation', 'management by objectives' and 'taxi-meter management'. Characteristic of the Danish system is also the fact that the social partners play an extremely important role — increased under the reforms — in vocational training. It is therefore appropriate to speak of 'occupational autonomy'. The Danish tripartite system is unique in Europe.

4.1.2.
Responsibility for the management and operation of vocational schools shifted after the reform of vocational training took effect on 1 January 1991, as did responsibility for the actual content of instruction and the updating of courses. The reform involved far-reaching decentralisation, which gave advisory bodies at lower levels greater influence and assigned a substantial share of the decision-making power to the 120 vocational schools.

4.1.3.
With the shift to management by objectives and setting frameworks, operational responsibilities were extensively devolved to the vocational schools. This facilitated structural changes within the Ministry of Education, accompanied by a 20 % staff reduction during the period 1989–93. In financial and educational respects, the Ministry of Education sets the objectives and framework for the schools' activities, in cooperation with the Vocational Training Advisory Council and the trade committees. The actual activities are the responsibility of the schools themselves.

4.1.4.
The structure of the Ministry of Education changed with effect from 1 September 1998. The new structure equips the Ministry for a future in which education will become ever more important to society. A small ministerial department and three large operational authorities will in future ensure greater consistency at all educational levels and a better and more uniform standard of service to the institutions. The authorities will take on all administrative tasks and tasks relating to educational policy and preparation of legislation, while the department will concentrate on advising the Minister. The aim of the restructuring is to ensure greater consistency between training schemes by breaking down administrative barriers between the individual types of training. At the same time, the new structure makes a distinction between content-related and operational tasks. The new structure enables the Minister to concentrate on mapping out overall lines of policy, instead of having to deal with a large number of detailed matters.

Figure 20. **Structure of the Ministry of Education from September 1998**


DEPARTMENT FOR GENERAL POLICY AND LAW
Minister
Permanent Secretary
Head of Department
Head of Legal Affairs
Head of Administration
Minister's Secretariat
Press Service
NATIONAL EDUCATION AUTHORITY
Director-General
Department of Primary and Lower Secondary Education
Department of General Upper Secondary Education
Department of Vocational Upper Secondary Education
Department of Higher Education
Department of Adult Education
Department of Educational Law
NATIONAL AUTHORITY FOR INSTITUTIONAL AFFAIRS
Director-General
Department for the Administration of Finances
Department for the Administration of Institutions
Division of Computer Processing
Controller Division
Statistical Information Division
STATE EDUCATIONAL GRANT AND LOAN SCHEME AUTHORITY
Director-General
Director for Legal Affairs
Division of Computer Processing

SOURCE: *MINISTRY OF EDUCATION NEWSLETTER NO 9, 2 JUNE 1998.*

4.1.5.

The National Education Authority is responsible for all administrative tasks and for advising the Minister on the content-related side of the education system. The authority's functions are to draft legislation on the content of education schemes, develop the pedagogical approach, set training targets and exercise surveillance over the various education areas. All the training councils and boards are attached to it. The National Education Authority is thus primarily concerned with the users of the education system.

BEST COPY AVAILABLE

The authority, which is headed by a director-general, is divided into departments for the following areas:

- primary and lower secondary education;
- upper secondary education;
- vocational education and training;
- higher education;
- adult education.

Up to now, the departments have taken responsibility for both the operation of the institutions and the content of courses provided in each type of institution. In recent years, however, the trend has been towards more uniformity in the management of institutions. The establishment of the new National Authority for Institutional Affairs takes this process further, so that it becomes possible to take advantage of best practice from the various departments, while at the same time the concentration of financial responsibility makes for more coherent prioritisation and rate-setting across the educational sectors.

4.1.6.

The National Authority for Institutional Affairs, which is responsible for all administrative and legislative tasks and for advising the Minister on the operation of the institutions and overall financial management, is primarily concerned with the providers of training. The authority rests on two pillars, one being responsibility for allocation decisions and financial management; the other consisting of responsibility for institution management, institution policy, legislation and administration. The authority is also responsible for the control division, statistics and forecasts and the Ministry's computer system.

4.1.7.

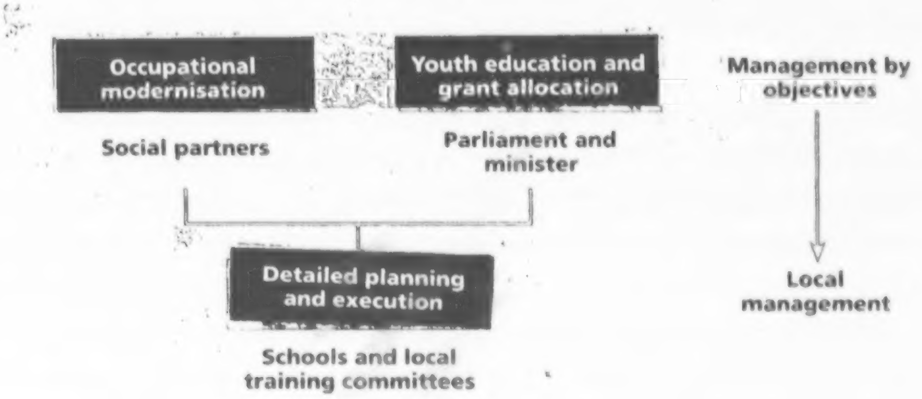
The Ministry will, as hitherto, include the State Educational Grant and Loan Scheme Authority (SU), but the authority now operates on the same footing as the two other authorities and has responsibility for the drafting of legislation, advice to the Minister, etc. The SU authority's area of responsibility will include all personal compensation and remuneration arrangements under the authority of the Ministry of Education — educational grants and loans (SU), the employers' scheme for the reimbursement of trainees' wages (AER), adult training support (VUS) and travel allowances (see Sections 2.2.3.8 and 2.2.4.5).

Advisory structure

4.1.8.

In the vocational education and training system the governance of the system is based on cooperation between the State and the social partners. The partners in the key areas of responsibility are, in the first instance, the boards of governors and the trade committees. However, the local training committees also share responsibility for ensuring that vocational training schemes work effectively in terms of the needs of the labour market and of young people.

Figure 21. **Management system for vocational training**


Occupational modernisation
Youth education and grant allocation
Management by objectives
Social partners
Parliament and minister
Detailed planning and execution
Local management
Schools and local training committees

SOURCE: ARNE HØJSTEEN, CONFERENCE CONTRIBUTION, 1988.

4.1.9.

The bodies setting objectives and frameworks at central level are the social partners, who are responsible for occupational modernisation and for the practical component of courses. Their influence over the school tuition aspects of training programmes has also increased considerably. The Ministry of Education is responsible for ensuring that vocational training courses have the breadth required for youth education and for allocating the necessary funds.

4.1.10.

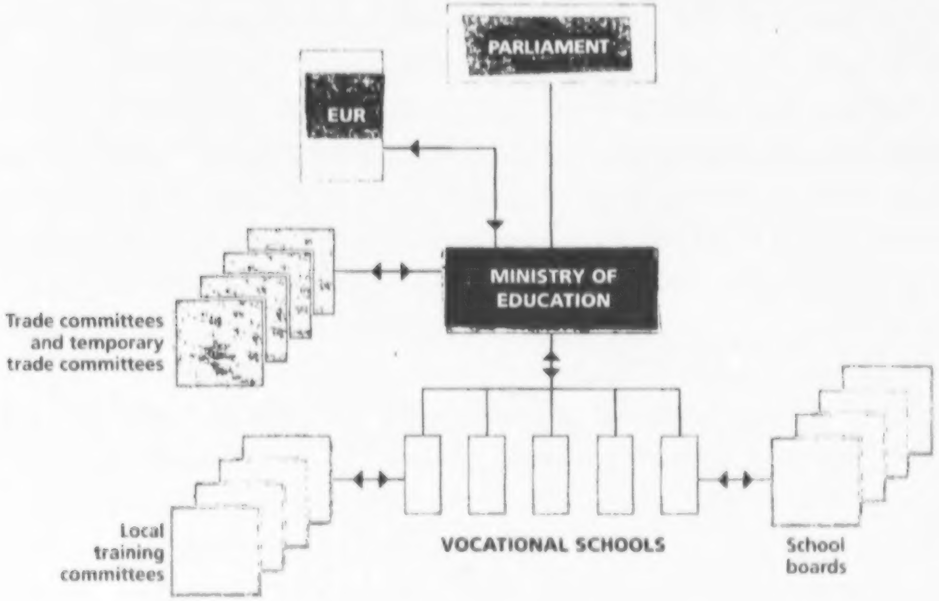
After the 1991 reform, detailed planning and execution were devolved to the level of individual establishments, where boards of governors have a particular role to play and where local training committees influence the detailed content of courses. The decision-making system in practice involves two forms of decentralisation under management by objectives: powers of decision are transferred from the Ministry to the boards of governors and responsibility is delegated by the trade committees to the representatives on the local training committees. Detailed management by central government has thus given way to more autonomy for the schools.

4.1.11.

Under the 1991 reform, the role of the advisory bodies changed and the advisory structure was simplified. The main thrust of the reform was to bring about greater occupational autonomy for the social partners with regard to updating the technical aims and content of training programmes, while ensuring that autonomy would be accompanied by greater openness towards initiatives from schools, companies, etc. in the interests of securing sufficient breadth and speed of response in the updating of courses.

BEST COPY AVAILABLE

Figure 22. **Advisory bodies within the decision-making system**


PARLIAMENT
EUR
MINISTRY OF EDUCATION
Trade committees and temporary trade committees
Local training committees
VOCATIONAL SCHOOLS
School boards

SOURCE: THE DANISH INSTITUTE FOR EDUCATIONAL TRAINING OF VOCATIONAL TEACHERS, 1998.

4.1.12.

The Vocational Training Advisory Council (*Erhvervsuddannelsesrådet — EUR*) concentrates, at central level, on general and interrelational functions. The EUR is the Ministry's advisory body for issues concerning training policy and for the overall aims and structure of vocational training. The Minister consults the Council on all matters concerning, for example, approval of vocational schools, approval of the assignment of courses to particular schools, approval of new courses, departures from the legal provisions for experimental purposes, etc.

The 20 members of the EUR are appointed by the social partners on a bipartite basis. The chairperson is appointed by the Minister for Education. In addition to the abovementioned members, EUR has two head teachers and two teacher representatives from the commercial and technical schools respectively. At central level — as at all levels in the decision-making process — the social partners are in the majority.

4.1.13.

The EUR can issue opinions on the need for better coordination of training courses and, where applicable, for courses to be combined, in order to ensure that vocational training is not too narrowly linked to trade-specific interests which the trade committees may sometimes seek to impose. In addition, on a recommendation from the EUR, the Minister may set up temporary trade committees, particularly where initiatives are taken to introduce a course in a new area, which had previously not been covered.

4.1.14.
The trade committees, numbering 55 in total, exert a decisive influence on the occupational aspects of training. As provided for by Act 211, they are appointed by the employers' and employees' organisations, with equal representation. The trade committees have their own secretariats and budgets, funded by the social partners themselves. They take decisions on the duration and structure of individual courses, including the breakdown as to school tuition and practical instruction, and on training objectives, framework rules for course content, practical training and assessment schedules for the general area and special subjects covered by the course. The trade committees are responsible for updating courses, and it has become more straightforward to propose and obtain approval for new courses or changes to existing ones.

4.1.15.
The development of 'occupational autonomy', which began in the 1920s as regards cooperation between the social partners and central government, was extended by the apprenticeship acts of 1937 and 1956 and continued in the EUD reform of 1989. It is clear from the act that the trade committees will continue to be the backbone of the advisory system.

Vocational schools

4.1.16.
The overall management system has devolved a number of functions to the school level. The individual vocational school has the right and obligation to deal with most financial and training matters itself. The board of governors and head teacher now have increased powers.

4.1.17.
The board is the top management body of the school and administers the block grant allocated by government in place of the previous specific allocations. In addition, the board takes decisions in collaboration with local interests on vocational training courses, continuing training, etc. which the school wishes to offer. Together with the head teacher, the board is also responsible for mapping out the detailed content of courses, although the main responsibility for this rests with the local training committees.

4.1.18.
The board consists of 6 to 12 members, one of whom is appointed by the county council and at least one by the municipal authorities. The board's composition must be such that it matches the occupational coverage of the school, and the social partners must be equally represented. Teachers and technical/administrative staff at the school each have one representative without voting rights. Students at the school have two representatives, also without voting rights.

4.1.19.
The main function of the local training committees is to assist the schools in planning the concrete content of courses given. They also provide advice on all matters concerning training at the school and help to strengthen contact between the school and the local labour market. One or more local training committees are

appointed for each school to cover the training courses offered. The majority in any committee must be made up of representatives of the organisations, which have a seat on the relevant trade committee.

The Minister for Education draws up assessment schedules for the individual training courses in line with the decisions of the trade committees, as far as general area subjects and special subjects are concerned. Assessment and/or examinations are conducted when the course ends, and the school issues completion certificates if requirements are met. When the trainee completes on-the-job training in accordance with the rules on practical training, the company also issues a practical training certificate.

4.1.20.
The actual course certificate is awarded by the trade committee, when the school certificate, practical training certificate and, where applicable, apprentice's certificate have been obtained. These provisions ensure, on the one hand, country-wide recognition of the quality of the training and, on the other hand, the status of the courses as youth education. On account of the important role assigned to the social partners, labour market approval of the courses is also ensured by this means.

Management of the adult vocational training system

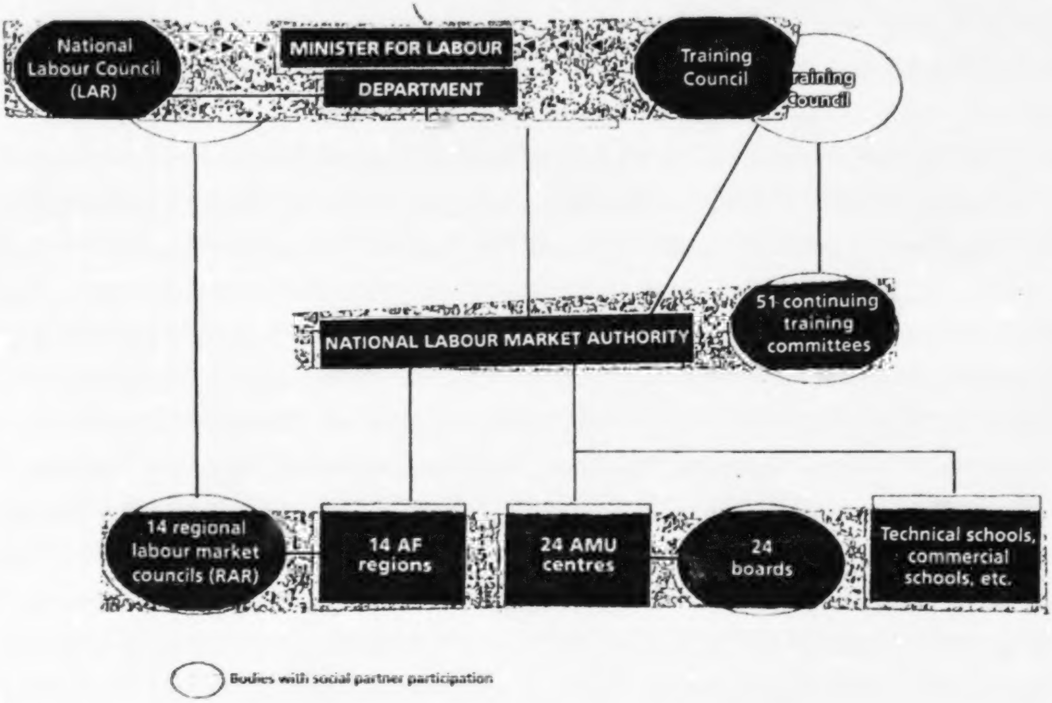
4.1.21.
There have been major changes in the organisation of the overall management of labour market policy in Denmark. The National Labour Market Authority (*Arbejdsmarkedsstyrelsen — AMS*) was set up in 1989. The Ministry of Labour now consists of the Department of the Ministry, the National Labour Market Authority, the directorate for the unemployment insurance system and the directorate for the working environment service, each with its subordinate units.

4.1.22.
The Labour Market Authority is essential to Danish labour market policy. The AMS was formed by a merger between the former AMU Directorate (the training directorate) and the Labour Directorate aimed at achieving a significant gain in efficiency through the close coordination of guidance, employment services and training. This resulted in the integration of the Public Employment Service (*Arbejdsformidlingen — AF*) and labour market adult vocational training (*Arbejdsmarkedsuddannelserne — AMU*). Synergy between the labour market's 'demand side' (AF) and the qualification 'supply side' (AMU) was thereby enhanced.

4.1.23.
The National Labour Market Authority is responsible for the public employment service, vocational guidance, legislation on migrant workers, equal opportunities, programmes to promote mobility, job and training offer schemes. It is also responsible for legislation relating to adult vocational training (AMU) and for the management and administration of AMU centres.

4.1.24.
Management of the labour market adult vocational training schemes (AMU) is governed by the act on labour market training (1993, amended by Act 1061 of 20 December 1995) (the AMU Act). The characteristic feature of the management and administration of the labour market training system is the influence exerted by the social partners. See Figure 23.

Figure 23. **Advisory structure of the labour market adult vocational training system**


National Labour Council (LAR)
MINISTER FOR LABOUR
DEPARTMENT
Training Council
Training Council
NATIONAL LABOUR MARKET AUTHORITY
51 continuing training committees
14 regional labour market councils (RAR)
14 AF regions
24 AMU centres
24 boards
Technical schools, commercial schools, etc.
Bodies with social partner participation

SOURCE: **AMU-ASSOCIATION: AMU-HÅNDBOGEN, 1998.**

4.1.25.

The AMU Act (*lov om arbejdsmarkedsuddannelser*) is a framework act covering:

- AMU qualifying courses;
- combined AMU programmes;
- individual skills assessment;
- enterprise-adapted courses (VTP).

4.1.26.

At the top advisory level, there is a Training Council to advise the Minister for Labour on issues common to all labour market training schemes, which can make recommendations to the Minister on its own initiative. The Council comprises a chairperson appointed by the Minister for Labour, eight members appointed by the Danish Confederation of Trade Unions (LO) and eight members appointed by the Danish Employers' Confederation (DA). See also Section 3.4.38.

4.1.27.

If the employers' and employees' organisations in a particular occupational sector consider that there is a need for a continuing training committee (an occupational committee) within the sector, they set up the committee. The committee is approved

BEST COPY AVAILABLE

by the Training Council. Some 50 continuing training committees have now been set up. The continuing training committees must have an equal number of employers' and employees' representatives. The members are appointed for a term of four years. The expenses of the secretariat and other costs are borne by the partners themselves.

4.1.28.
The continuing training committees play a decisive role in updating labour market training courses. They are appointed by the social partners on a bipartite basis and consist of 4 to 10 members. There is no government representation on these committees, which correspond to the trade committees in the vocational training system. Work in the continuing training committees and trade committees has been increasingly coordinated in recent years, and representation is now identical in a number of areas.

The continuing training committees have the following functions:

- to identify and make recommendations on training requirements in the sector;
- to formulate proposals on training programmes for the sector and on syllabuses for individual courses;
- to formulate proposals on the financial basis for setting rates applicable to training courses and combined programmes;
- to propose experimental and development work;
- to develop and propose training courses for instructors in particular technical or occupational sectors; and
- to document and investigate conditions within a training area.

4.1.29.
The interaction between the National Labour Market Authority and the AMU centres has been decentralised, and the 24 AMU centres have acquired greater freedom of action, for example through the introduction of IDV (revenue-funded) and VTP (enterprise-adapted) courses. For these facilities, requesting companies pay 100 and 50 %, respectively, of the course costs but in return get courses specially tailored to their needs.

4.1.30.
Management by objectives within a given framework has been introduced in the AMU training system. This offers greater scope for local adaptation of courses. In parallel with the vocational education and training system, the adult vocational training system has moved from management by content to management by objectives, with a clear commitment to preserving the nationwide merit-conferring status of courses, in order to ensure that qualifications gained by participants are the same throughout the country.

4.1.31.
The introduction of management by objectives means that management is only subject to training objectives set centrally, supported by guidelines on educational methods and possibly other material, which are nevertheless not binding on the individual teacher. This gives both the school and the individual teacher greater freedom of choice as regards the form and method of teaching, exercises, etc. The

central authorities will continue to exercise responsibility for the development of education and training courses and for the maintenance of proficiency standards and national recognition of qualifications, but responsibility for the development of the actual teaching process has increasingly been devolved to the schools or centres.

The overall decision-making system

4.1.32.

Figure 24 below illustrates the overall structure of powers and responsibilities in the Danish vocational training system.

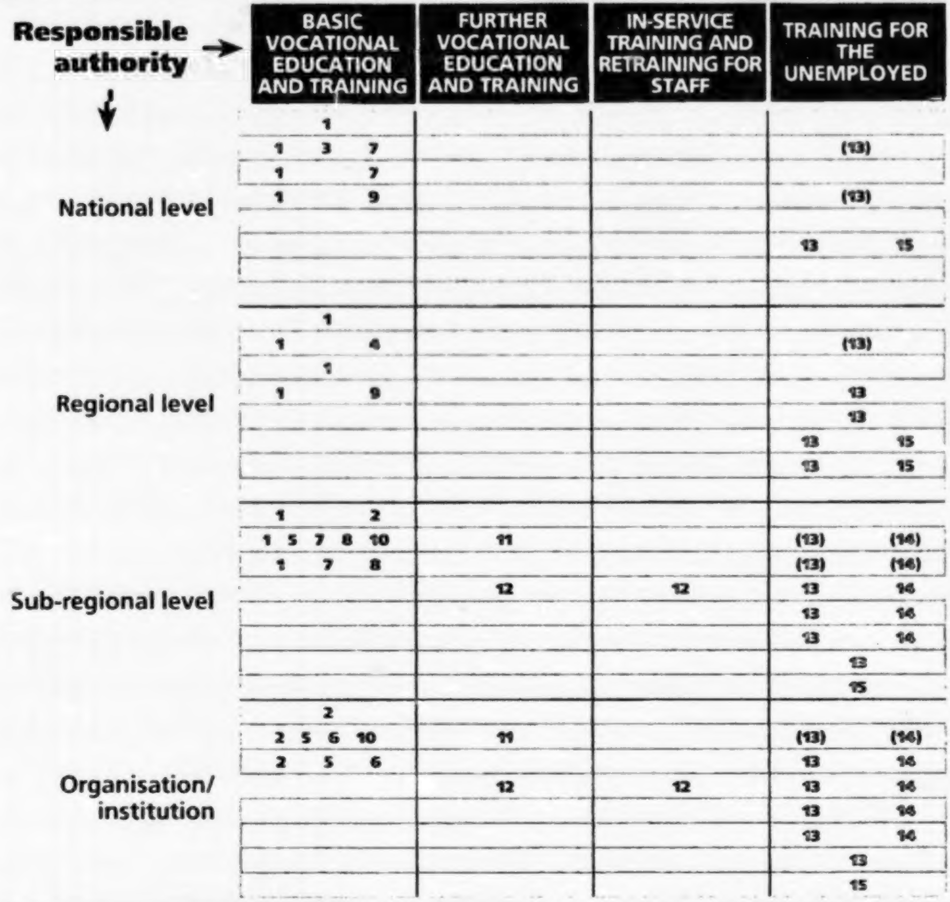
4.1.33.

A strong tradition has evolved of institutionalised cooperation between the State and the social partners in the development and management of vocational education and training activities. There are a great many advantages to this 'Danish model'. It makes for greater thoroughness in the preparation of new training provisions, and the resulting schemes are accepted by the organisations representing companies and their employees. The training schemes are always assured of labour market support and their value is generally recognised.

4.1.34.

However, there is a need to ensure that training schemes receive fresh impetus. This already happens to a certain extent; there is a tradition of consulting experts in new fields of technology and of including qualification analysis in the preparation of new syllabuses and the like. Further refinement of training schemes is also to a high extent brought about through such activities as development projects in schools.

Figure 24. **Responsible authorities**



Responsible authority →	BASIC VOCATIONAL EDUCATION AND TRAINING	FURTHER VOCATIONAL EDUCATION AND TRAINING	IN-SERVICE TRAINING AND RETRAINING FOR STAFF	TRAINING FOR THE UNEMPLOYED
National level	1			
	1 3 7			(13)
	1 7			
	1 9			(13)
				13 15
Regional level	1			
	1 4			(13)
	1			
	1 9			13
				13
				13 15
				13 15
Sub-regional level	1 2			
	1 5 7 8 10	11		(13) (14)
	1 7 8			(13) (14)
		12	12	13 14
				13 14
				13 14
				13
				15
Organisation/ institution	2			
	2 5 6 10	11		(13) (14)
	2 5 6			13 14
		12	12	13 14
				13 14
				13 14
				13
				15

1. Ministry of Education
2. Ministry of Labour
3. Vocational Training Advisory Council (EUR)
4. Vocational Academy Council
5. National Labour Market Authority (AMS)
6. Training Council (AMU)
7. Trade committees
8. Continuing Training Committee
9. Council for Educational and Vocational Guidance (RUE)
10. National Labour Council (LAR)
11. Regional labour market councils (RAR)
12. Public employment offices (AF)
13. Vocational schools
14. AMU centres
15. Companies

( ) = organisation/institution does not play a predominant role.

Function:

Management of system

Establishment of goals and content

Evaluation and accreditation

Information and guidance

Delivery:

Entirely school-based

Alternating training

Self training

Entirely company-based

SOURCE: *DEL, 1998.*

BEST COPY AVAILABLE

4.2. Financing of vocational training

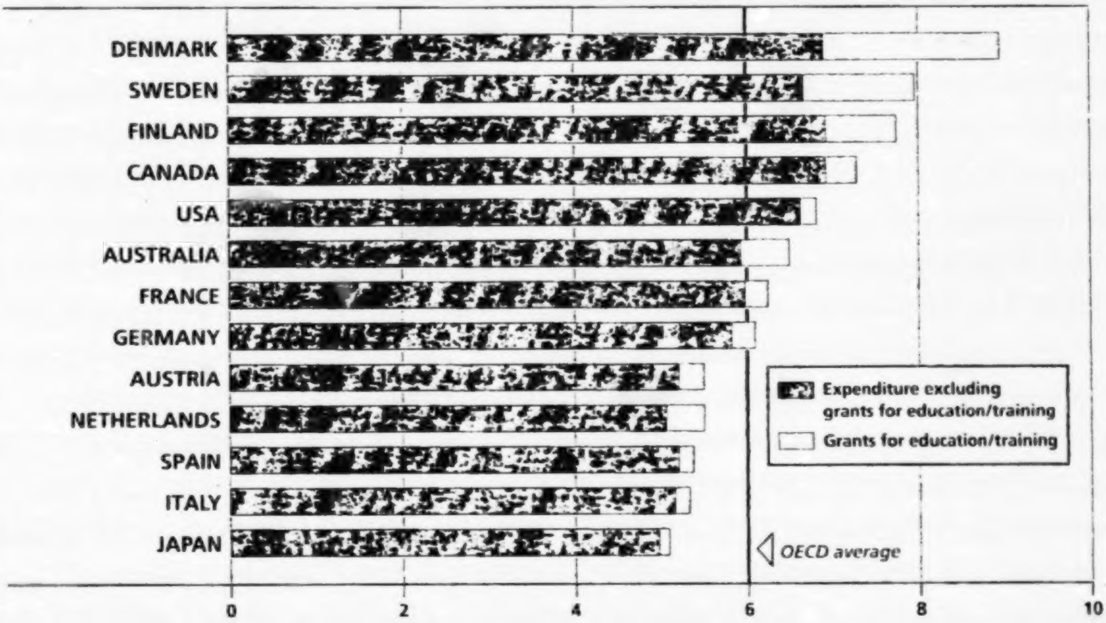
Public expenditure

4.2.1.

Expenditure of the State, the municipalities and counties on education is expected to total close on DKK 71 billion in 1998, amounting to 6 % of GNP and at least 12 % of total public expenditure. Primary and lower secondary education, youth education and further education account for slightly over three quarters of the expenditure. Added to this is support from the State Educational Grant and Loan Scheme (*Statens Uddannelsesstøtte — SU*), representing at least 9 % of total expenditure on education. The remainder is spent mainly on adult and post-school education, including continuation schools (*efterskoler*), people's high schools (*folkehøjskoler*) and general adult education. Total expenditure on education, at constant prices, rose by an average of 2.2 % per year over the period 1990–98. At constant prices, average real growth in expenditure per pupil at primary and lower secondary school rose by approximately 2.5 % per year in the period 1990–96; in the same period average real growth per student in youth education and further education was 1.2 and 1.4 %, respectively.

According to the OECD's 'Economic Survey, Denmark 1997', Denmark is one of the OECD countries which spend most on education; see Figure 25 below.

Figure 25. **Public expenditure on education (% of GNP)**



SOURCE: **OECD ECONOMIC SURVEY, DENMARK 1997.**

Table 15. Trends in public expenditure, and student and teacher numbers, 1985–95

	1985	1995	Percentage change
Primary and lower secondary education			
Expenditure (¹)	25 400	26 317	4
Pupils	709 681	589 549	– 17
Teachers	62 000	58 000	– 6
General upper secondary education			
Expenditure (¹)	4 424	4 870	10
Students	76 278	99 253	30
Teachers	6 000	8 000	33
Vocational education			
Expenditure (¹)	4 803	5 077	6
Students	53 010	49 731	– 6
Teachers	9 000	9 000	0
Further education			
Expenditure (¹)	8 359	10 029	20
Students	75 846	135 673	79
Teachers	9 000	8 000	– 11
Adult and continuing education			
Expenditure (¹)	3 189	5 101	60
Students	80 732	113 663	41

(¹) DKK billion, 1995 prices.
EUR 1 = DKK 7.4480

SOURCE: OECD ECONOMIC SURVEYS 1996–97, DENMARK.

Considerable resources are also devoted to adult and continuing education in Denmark, compared with other countries. Close on 2.25 % of GDP is spent on this. Public funding accounts for 70 % of this expenditure, companies pay 29 % and participants a mere 1 %.

4.2.2.

Vocational education and training is special, in that it is both training and work. Young people on vocational education and training courses 'buy' their own training, paying for it through their work. With this blend of schooling and practical training, there are three different sources of funding for vocational training. The State pays for the school parts of the training. The employer pays the trainee a wage during the practical work experience part (regulated, along with other working conditions, by the collective bargaining system) and is reimbursed for the trainee's wages during school attendance through grants from a collective employers' fund (*Arbejdsgivernes Elevrefusion — AER*).

An account is given below of the funding of school attendance periods and the associated rules and allocation mechanisms. The practical work experience parts of vocational training are governed by normal market mechanisms on the labour market and will not be discussed here.

Funding through taxation

4.2.3.

Total government spending on vocational schools amounted to DKK 6.8 billion in 1997 (including joint expenditure, but excluding contributions to the State Educational Grant and Loan Fund). There are considerable fluctuations in the individual items, due in particular to changes in the allocation mechanisms after the vocational training reform in 1991.

Table 16. **Expenditure on vocational training, by type of training, 1986 and 1997 (DKK million)**

	1986	1997
Basic vocational training	4 696	2 666
Upper secondary vocational education	966	1 172
Social welfare and healthcare training	424	227
Agricultural training	114	173
Other training	26	7
Teacher training for vocational education	55	13
Joint expenditure	952	2 396

SOURCE: *BUDGET STATEMENT FROM THE MINISTRY OF FINANCE, 1997.*

4.2.4.

The activity of a school — typically the number of trainees who take a particular course — and the results achieved by it determine the amount of the grant allocated. The way the school wishes to conduct its activity is not a factor. This principle is called the 'taxi-meter system', because it consists of two factors, namely recorded kilometres (number of trainees taking the course) and a fare per kilometre (here, the rate per trainee).

4.2.5.

In vocational training, the term 'class-year trainee' is used as a measure of the extent of training activity. The methods of recording 'class-year trainees' vary from one training area to another. The system has been introduced in the majority of Danish education schemes but, for vocational training, a class-year trainee is defined as a trainee who completes one year's training on a full-time basis (corresponding to 40 weeks).

4.2.6.

The second taxi-meter element, the rate per class-year trainee, is fixed at a political level when the annual budget is drawn up. The amount approved sets the standard the politicians want the training to attain. The schools then arrange courses so that they correspond to the approved financial standards. They are free to dispose of the funds as they see fit, provided the activity objectives and training objectives are achieved. Rates vary according to the nature of the course. Decisive criteria include use of equipment in training, use of buildings and safety requirements in respect of teacher/trainee ratio.

Table 17. **Vocational training, taxi-meter rates per trainee, 1998 (DKK million)**

Commercial schools, first school period	38 100
Commercial schools, second and subsequent school periods	39 300
Technical schools, first school period	43 700
Technical schools, second and subsequent school periods (*):	
Food	47 500–64 800
Services	47 500–64 800
Agriculture	56 100–64 800
Construction and civil engineering	56 100–64 800
Inland transport	73 700
Engineering	47 500–73 700

(*) The 'taxi-meter' rate per class-year trainee varies within the individual training sectors.

SOURCE: **DANISH FINANCE ACT, 1998.**

4.2.7.
For the upper secondary vocational education courses there are special rate groups; for the HHX system the rate for 1998 is DKK 34 200, and for the HTX system DKK 56 100.

4.2.8.
In addition to 'taxi-meter' grants, which are paid to the schools and not to the trainees, there are other general, trainee-dependent grants: a general basic grant, refund of property rent and trainee-dependent grants for administration and running costs.

4.2.9.
With free choice of vocational school, it is the users and not, as previously, the public authorities who decide how capacity is to be reduced or expanded. The financial management principles take account of the fact that there will be fairly substantial fluctuations in future pupil and trainee intakes. The schools are in a situation of competing with one another for 'customers' and, in principle, if a school cannot attract trainees, it must close.

4.2.10.
Unit costs per trainee are fixed, so that smaller class sizes due to demographic trends will immediately result in savings for the government. In this way, the general increase in unit costs measured in hours of teachers' pay per trainee, which occurred in the primary and lower secondary schools, can be avoided. At the same time, the necessary adjustment in the number of vocational training schools will take place automatically, as some will close of their own accord on account of objective activity criteria. School closures, mergers, etc. are to be expected as part of a process of adjustment to the market and in order to strengthen the position of the schools on the market. The first mergers had already taken place in 1991, since when a number of schools have concluded cooperation agreements.

4.2.11.
Total government expenditure on vocational training is funded through the general taxation system, which in Denmark accounts for a higher proportion of public expenditure than in the other European countries, where labour market contributions play a greater role.

Financing from collective funds

4.2.12.
Vocational education and training is alternance training, i.e. school attendance alternating with practical work in companies. If training starts with a training contract (on-the-job admission route), the trainee must be paid wages for the duration of the training period, including periods of school attendance. If the trainee starts training first at school (school admission route), no wages are paid, but assistance may be provided from the State Educational Grant and Loan Scheme. Wages are paid only when a training contract has been concluded.

4.2.13.
The company is refunded the wages it pays during school attendance from the employers' collective scheme for the reimbursement of trainees' wages (*Arbejdsgivernes Elevrefusion — AER*). The AER scheme was set up by law in 1977 to refund employers all or part of wages paid to trainees during their time spent at school. AER is financed from contributions paid by all private and public sector employers. AER thus covers all employers, who both finance the scheme and are reimbursed from it. Each quarter a contribution is paid into the fund, amounting in 1997 to DKK 1 130 per full-time employee. In 1996, the fund collected a total of DKK 2 280 million from employers. In addition, there was a State grant of DKK 613 million plus interest receipts of DKK 33 million, so that total income was DKK 2 925 million.

4.2.14.
AER is a joint scheme established to increase the supply of apprenticeship and practical training places by spreading the financial burden between those employers who take on the task of training young people in vocational skills and those who play less of a role in the process.

AER is an autonomous institution managed by the social partners. Amendments to the AER Act in 1990 added provisions for financing school-based instruction to compensate for company-based practical training, which is paid for in full by employers. The total contribution for the funding of individual AER schemes is fixed for each year by the Minister for Education on a recommendation from the AER board.

4.2.15.
In 1996, transfers totalled DKK 3 104 million, breaking down as to DKK 1 150 million for wage reimbursement, DKK 75 million for the travel allowance scheme and DKK 1490 for school-based instruction taking the place of company-based practical training and DKK 390 million for a number of other initiatives.

Financing of continuing vocational training

6.2.16.

In Denmark some DKK 9.2 billion is invested annually in continuing vocational training (CVT), excluding expenditure for wage compensation and unemployment benefit. Expenditure for these purposes is estimated at approximately DKK 4.7 billion, so that total annual investment is in the region of DKK 14 billion (EUR 2 billion).

These figures should be approached with caution, however, as they are estimates. The statistics in this area still lack precision. They are based on data and calculations from the Ministry of Finance, which in July 1994 published the report of a committee on adult and continuing training (*rapport fra udvalget om voksen- og efteruddannelse*). It is thought that these figures are still the most detailed and accurate ones available. The figures presented are for 1993.

6.2.17.

Expenditure for publicly financed CVT amounts to DKK 5.2 billion, while that associated with privately financed CVT can be roughly estimated at DKK 4 billion per year. The amount financed by the private sector is particularly difficult to assess with any degree of accuracy. On the basis of these estimates, it may be concluded that around 1.6 % of the Danish GDP is devoted to CVT. If all associated costs are included in the calculation, i.e. expenditure on wage compensation, training allowances and unemployment benefit as well, the total cost amounts to about 2 % of GDP.

6.2.18.

How and from what sources of financing is the expenditure on CVT in Denmark funded? Again, we have to base our presentation on the abovementioned report. Total expenditure for 1993 is estimated at approximately DKK 14 billion, including wage compensation, etc., broken down as follows:

• State:	DKK 9 900 million
• Enterprises:	DKK 3 900 million
• European Social Fund:	DKK 275 million.

A major proportion of the continuing training on offer is provided free of charge by the public sector and is thus financed from taxes. Another mode of financing is the joint contribution from employees and employers, the labour market contribution to the Employment Promotion Fund (*Aktiveringsfonden*). Finally, there is a certain amount of direct financing by individual enterprises or individual trainees from their own pockets. All three modes of financing are effective in the field of continuing vocational training.

6.2.19.

State expenditure on continuing vocational training is not financed from direct taxes, but from the 'labour market contribution' (*arbejdsmarkedsbidrag*), which is an 8 % gross tax paid by all employed persons in Denmark. Total revenue from the labour market contribution in 1996 amounted to DKK 56 billion. The revenue is allocated to three State funds:

- the Unemployment Benefit Fund (*Dagpengefonden*)
- the Employment Promotion Fund (*Aktiveringsfonden*)
- the Sickness Benefit Fund (*Sygedagpengefonden*).

The Employment Promotion Fund finances State expenditure on adult and vocational training schemes.

4.2.20.
AMU adult vocational training activities are thus financed through the Employment Promotion Fund. The State defrays the expenditure on the operation of AMU centres, but the State's expenditure is refunded annually by the Fund on a block basis. Educational performance rates are set for all AMU courses (except for TAMU work experience courses); previously this only applied to the qualifying courses. The training establishments receive payment at this 'taxi-meter' rate for all trainee-weeks they complete. In addition, a basic grant is provided, plus an overheads grant to cover buildings and maintenance. The Ministry of Labour takes decisions on the classification of individual training plans in one of the 25 rate groups, which are listed in a rate catalogue. The ranking is based on the cost level of the training course in question. Total State expenditure on AMU training courses was approximately DKK 2.67 billion in 1996, including around 1 billion in AMU payments (wage compensation) to participants.

4.2.21.
The other adult and continuing training schemes, such as open education (*åben uddannelse*) are financed through a 'taxi-meter' system from public funds, supplemented by user payments (20–50 %) for operating expenses. In 1996, State expenditure on activities under the open education scheme amounted to approximately DKK 750 million (EUR 100 million), corresponding to 20 % of total public expenditure on CVT.

4.2.22.
Continuing training provision for especially vulnerable groups is financed from the Employment Promotion Fund, including regional resources for the training of unemployed persons. The training of uninsured unemployed persons is financed partly via the Employment Promotion Fund, for example when the person concerned takes part in an AMU training scheme, and partly from municipal and county employment promotion funds.

4.3.23.
For general adult education and single-subject courses for the Higher Preparatory Examination (HF), a modest annual fee is payable by participants. On the private course market, the full cost is payable. Adult vocational education outside the AMU system (*voksenerhvervsuddannelse — VEUD*) is free of charge to participants, and firms providing practical training pay wages to the adult trainee during his or her stay with the firm.

4.2.24.
Firms part-finance enterprise-adapted training (VTP) AMU courses and pay the full cost of 'tailor made' courses (IDV) at AMU centres and vocational schools, etc. In most cases, firms will pay wages and other expenses to employees during their participation in courses. Firms normally also pay for their employees' participation in courses on the private training market. As a rule, firms make up their employees' course allowance to full pay during participation in AMU courses. A study from 1994 shows that two thirds of enterprises set aside money in their budgets to finance or part-finance the continuing vocational training of their staff.

Grants from the European Social Fund

4.2.25.
The European Social Fund (ESF) contribution to vocational and labour market training relates mainly to Objective 3: combating long-term unemployment, and Objective 4: promoting the vocational integration of young people; Objectives 1, 2 and 5 are of no significance. ESF financing in Denmark cannot amount to more than about 45 % of the total expenditure on a project or exceed the sum contributed from national public funds.

The total amount of support from the European Social Fund in 1996 was DKK 480 million. Of this, DKK 143 million was earmarked for projects with a CVT content. Such projects provide support for regions affected by industrial decline (Objective 2), for the adjustment of the labour force to industrial change (Objective 4), for the development of rural areas (Objective 5b) and for the adaptation of the workforce to structural change (ADAPT). A minimum of 50 % of ESF funds must be allocated to training activities.

Grants from the ESF are administered by the Ministry of Labour. The Danish management of ESF activities is split between 15 regions, plus the municipalities of Copenhagen and Frederiksberg (through the Social Fund Committee), which administer Objective 3; the Danish Centre for International Training Programmes (ACIU), which administers Objective 4, 'Adapt' and some of 'Employment'; and the National Labour Market Authority and Ministry of Social Affairs, which administer other parts of 'Employment'.

Chapter 5
Qualitative aspects

5.1. Qualifications and certification

5.1.1.

A feature of vocational training in Denmark is that courses conclude with tests or examinations. Apprenticeship certificates or final certificates are issued on successful completion of vocational training courses, and course certificates, examination certificates or proficiency certificates are awarded in respect of continuing or further training courses. Success in these tests or examinations constitutes proof of merit recognised throughout the country. The great majority of training courses enjoy the crucially important recognition of the labour market, since the social partners in the various trades, industries and sectors have themselves either determined or had an influence in formulating the objectives and examination procedures for the courses.

5.1.2.

The social partners are extensively involved in the management of vocational training. They also play a key role in assuring the correct level of expertise by their contribution to the work of setting rules and monitoring examinations and tests. This applies in particular to the adult vocational training system operated by the labour market (AMU) and to the trade-based elements of vocational education under the supervision of the Ministry of Education.

5.1.3.

The modular structure of AMU courses is organised in such a way that the individual modules confer a standard of proficiency in their own right, but at the same time stand as entry-level qualifications for follow-on modules, so that a progressively rising level of proficiency can be built up. Those participants who have satisfactorily completed a shorter AMU qualifying course (normally no longer than six weeks) are awarded a certificate by the training establishment which describes the qualifications obtained by the participant. The certificate stands on its own as proof of a certain level of vocational proficiency. At the same time — either directly or in combination with relevant employment — it can give access to further AMU training or provide credit for ordinary vocational training courses. It is normally the trade-based continuing training committees, which elaborate the certificates. In the case of combined training programmes, the training establishment also awards a certificate for each of the specific AMU courses forming part of the programme which have been completed in full.

5.1.4.

Where courses governed by the Ministry of Education are concerned, the rules are laid down by the Ministry, but with involvement of the social partners in certain areas of CVT provision at commercial or technical schools. Courses usually conclude with examinations involving external examiners.

5.1.5.

It is possible for work experience to be credited as training merit for a range of courses in the AMU system, in adult vocational education outside the AMU system and on courses in the open education scheme.

5.1.6.

Private continuing training does not normally involve recognised examinations or certificates. However, possibilities are opening up in the supply system for private providers to offer training and conduct examinations on an equal footing with public training establishments.

5.1.7.

The way the overall continuing training and adult education system is structured presents some crucial challenges, not least if the objectives for lifelong learning are to be achieved. In order to bring about greater consistency in the rich variety of adult education, the Minister for Education in October 1996 presented a discussion paper on the possible establishment of a new parallel proficiency system for adult education (see Section 6.4) with a view to legislation at an early date. The intention is to give adults on the labour market the same chances as young people to take up new job and training challenges. In the future, it should be possible for adults to secure recognition both of vocational experience and of course participation and personal qualifications, thereby enhancing their ability to pursue studies or obtain a job. The social partners will be involved in the work, will help to set objectives for practical skills and will take on a key role in the recognition of the vocational experience acquired.

5.2. Training for teachers in vocational education

5.2.1.

One possibility for further development is to train to be a vocational school instructor, though there is no specific course leading to a qualification as a teacher in vocational education. The typical situation is that a person first undergoes training in a given trade or occupation and, after a minimum of five years' relevant vocational experience, decides to become an instructor at a vocational school. It is considered a particularly valuable feature of the Danish vocational education system that over half the teachers at technical schools and AMU centres have a background as skilled workers, qualifying later for a job as an instructor through basic, continuing or further training in educational studies. This enhances the interplay between school tuition and on-the-job training in the alternating system; it also means that the schooling element can focus in a more practical and concrete way on the tasks for which the trainees are to become qualified.

5.2.2.

Training for vocational instructors is provided by the Danish Institute for Educational Training of Vocational Teachers (*Danmarks Erhvervspædagogiske Læreruddannelse — DEL*), which is an autonomous body under the Ministry of Education. The training takes place at DEL's three regional establishments and covers both basic training in educational studies and continuing and further training in occupationally based educational studies. Basic vocational teacher training was reformulated in 1997 in a new scheme based on an executive order issued by the Ministry of Education (*Bekendtgørelse* 677 of 12 July 1996), which lays down a common framework for all teachers at commercial schools, technical schools and AMU centres.

5.2.3.

On recruitment as a vocational school instructor, the trainee takes a basic course in educational studies (*pædagogikum*), which alternates between theory modules and practical tuition under the guidance of an experienced instructor at the recruiting school. The theoretical part of the *pædagogikum* covers a range of topics in the fields of educational science, psychology and didactics. The training takes place with extensive trainee involvement and use of project work as a tool. It concludes with a substantial written assignment, prepared individually or on a group basis, and the oral theory test focuses on this assignment. A characteristic feature of the theoretical part is that it is very closely linked to and takes its starting point in practical problems. The theoretical part of the *pædagogikum* has a total duration of 14 weeks on a full-time basis. The practical part takes four weeks on a full-time basis.

5.2.4.
Setting common objectives for the individual topics ensures integration of the content of the theoretical and practical parts of the training. Vocational education theory and its concepts are used to promote an understanding of and reflection on what happens in practice and to provide guidance for practice. Through work on authentic teaching and instructor-focused tasks in the practical part, the participant also has an opportunity for theoretically based reflection, i.e. is able to process the practical experience gained theoretically.

5.2.5.
In both theoretical and practical parts, the trainee is required to be actively involved in detailed planning, organisation of content and choice of working methods. The practical part of the *pædagogikum* normally takes place at the school where the trainee has already taken a job as an instructor. Initially, the trainee follows the lessons of his study counsellor and gradually takes over the tuition himself. The counsellor and the trainee discuss the organisation of the tuition and subsequently assess progress. The counselling period, normally 150 hours, concludes with the test of practical teaching ability in which the trainee, in the presence of an external examiner, first conducts a lesson he has prepared himself and subsequently explains the pedagogical basis of his approach.

DEL awards an examination certificate on successful completion of a *pædagogikum*.

The *pædagogikum* is paid for by 'taxi-meter' payments to the vocational schools and is free of charge to participants, who receive a normal salary from their schools during the training.

5.2.6.
The continuing and further training of vocational school instructors includes a wide and varied range of training options, consisting of either general pedagogical/psychological courses or teaching courses geared to specific trades or occupations. Over the past decade, there has been a major restructuring of these continuing training facilities, the emphasis shifting perceptibly from traditional, formalised courses to school-based development and consultancy services. The schools formulate their own needs and procure services on the free market, in which DEL is one among many providers.

5.2.7.
This change was supported by the establishment of new allocation mechanisms in the Ministry of Education around 1990, in which resources for instructor training were switched from the teacher training institution, DEL, to the vocational schools, which are free to dispose of these resources as they see fit. As a result, the vocational schools have taken a more active role in planning the continuing development and qualification of their staff out of a desire to raise the collective

competence of the organisation. Hence traditional courses are not the right answer. Generally speaking, the development of instructor qualifications has been strengthened by this process, and continuing training has become more demanded. Work on the specific needs of a given school has become the central area, and new educational principles, such as action learning, have been introduced in recent years. In addition, educational innovation and development work, often organised as a cooperative venture between a vocational school and DEL, is playing a major role as an element in continuing instructor qualification.

5.2.8.

In 1997, a diploma course in vocational education studies was established as a new higher education option for experienced teachers. This course, which is offered under a cooperative scheme involving the Danish Institute for Educational Training of Vocational Teachers (DEL) and the Danish School of Educational Studies (*Danmarks Lærerhøjskole*), provides qualifications for work in the planning, management and development of courses and tuition in the field of vocational training. The diploma course is an extension to existing teacher training and requires two years' relevant professional experience plus knowledge and experience of the vocational training field. The course comprises four modules:

- qualifications and competencies;
- holistic approach, interdisciplinarity and teaching environments;
- system knowledge;
- development work in vocational education studies.

5.2.9.

The diploma course is offered in the form of part-time training spread over two years under the Open Education Act. In aggregate, the course comprises one year of study. The course gives access to a degree course in educational studies at a university with full credit for the first undergraduate year. The diploma is a crucial step towards the professionalisation of the job of vocational training instructor in Denmark.

5.2.10.

In Denmark, there are no 'training of trainers' programmes, in which those responsible for training in enterprises are themselves trained to act as instructors or counsellors to apprentices. Even though about two thirds of the total time spent on vocational education and training courses is devoted to on-the-job training in the firm with which the trainee has concluded a contract, Denmark has no tradition of such instructor training.

5.3. Educational and vocational guidance

5.3.1.

Under the Ministry of Education executive order on educational and vocational guidance issued on 21 November 1990, schools arrange their own educational and vocational guidance facilities in terms of form, content, organisation, staff, etc.

The aim of educational and vocational guidance at vocational schools is to enable the individual student to make considered choices before or during his/her training with a view to the organisation of a training programme or the pursuit of subsequent vocational and educational options. It should also offer the individual student assistance in solving educational, personal and social problems in relation to the training situation. It is the job of the schools to ensure that guidance is offered to potential students and to all students attending the school, regardless of their direction of study.

5.3.2.

The guidance can take the form of collective, group and individual educational and vocational counselling. In the case of individual and personal counselling in vocational education and training and vocational upper secondary education, the schools use members of the permanent staff — teachers who have had supplementary training in counselling. At the vocational schools, relatively speaking, most counselling resources are deployed on youth education courses. The school's other teachers provide guidance in connection with general tuition.

The first school period of vocational training (see Section 3.2.16) is designed to give the student a broad and thorough introduction to one or more training areas so that, by testing his own abilities and interests, he forms a good basis on which to make a choice for the second school period in the training. Vocational and educational guidance is given partly through counselling interviews with the individual students and partly through tuition.

5.3.3.

Many courses include 'guidance elements' in the form of collective counselling and as components of subjects taught, for example knowledge of conditions on the labour market and ability to write an application. Guidance is thus an integral part of the teaching. In addition, instructors at vocational schools have usually worked in industry for five years prior to recruitment, thus contributing knowledge of a trade or industry which is used at technical schools, amongst other things, to procure work experience placements.

5.3.4.

Finally, schools can choose to use more of the resources from their 'taxi-meter' allocation for guidance purposes (the 'taxi-meter' allocation is a block grant provided in respect of each class-year trainee). These funds are often spent in connection with 'open house' events or exploratory visits. An executive order stipulates that guidance officers must pursue constructive cooperation with other local and regional guidance systems.

5.3.5.

Individual and personal guidance is provided by counsellors or guidance officers, who have to use at least a given minimum of resources allocated for that task. For the individual technical school, the minimum consumption of resources is calculated as the number of class-year trainees times 4.9 working hours. At the commercial schools, it is also worked out on the basis of the number of class-year trainees, but multiplied by the factor 3.45. Typically the teacher works as a counsellor for about 800 hours per year, which corresponds to just under half the hours output normally required of a teacher. The minimum number of hours to be devoted to the task is 300.

5.3.6.

The guidance function is performed by at least 600 counsellors (breaking down as to a little over a half at the technical schools, the remainder at the commercial schools), generally teachers at the school employed on the basis of the current rules on teacher qualifications. At the commercial schools, the sex distribution of counsellors is roughly even. At the technical schools, 80 % of counsellors are men, 20 % women. The figures in both cases match the sex distribution of the students. About 90 % of counsellors have undergone training in counselling. The training is provided by DEL and is organised as alternance training consisting of a theoretical part and practical guidance work. The theoretical part comprises about 400 hours, spread over two years, with the following content: counselling theory and methods, the training system, working life and the labour market, and the role and function of counselling.

Concurrently with the training, the teacher acts as a counsellor in practice.

5.3.7.

The training culminates in a final project, in which the participant, either alone or in collaboration with other participants, works on a specialised guidance problem of his or her own choice. The project concludes with a report forming the basis for a defence of the project and a discussion of key problems in the content of the training as a whole. DEL issues an examination certificate when the participant has passed the final test.

Continuing training of educational and vocational counsellors is provided partly by the Council for Educational and Vocational Guidance (*Rådet for Uddannelses- og Erhvervsvejledning — RUE*) and partly by DEL.

5.3.8.

At all AMU centres, guidance is provided for incoming trainees in conjunction with registration at the training establishment. In addition, counselling is to a large extent integrated into the tuition on the individual courses. In 1996, a new programme was introduced, 'Individual skills assessment' (see Section 3.4.32), which is an assessment and guidance programme taking three weeks and consisting of three elements:

- study and training guidance;
- technical occupational assessment in workshops; and
- general assessment of occupational abilities.

Following on from this, a training plan is drawn up based on the capabilities and needs of the individual. No resources are set aside specifically for guidance work.

5.3.9.

There is no special basic training for counsellors in the AMU system. According to the guidelines for 'Individual skills assessment', the individual school is responsible for ensuring that the subject teachers who take on the counselling function possess the necessary qualifications (see Section 3.4.32). The regional (adult) counsellor training schemes can provide training for AMU counsellors. In addition, there is the new adult counsellor training course in the open education system.

5.3.10.

Lifelong learning and recurrent training are burning issues in the current labour market and training policy debate. If such strategies are to be successful, there is a need to improve guidance services for adults. The adult counsellor training course has been set up by the Ministry of Education and will be offered from 1999 onward, as part of an overall plan for recurrent training. The aims of the course are:

- for students to gain an understanding of the theory and practice of adult counselling;
- for students to acquire the ability to provide and develop adult guidance under variable conditions and in different contexts;
- to promote the occupational and personal development of students through unsupervised work on the course content and through participation in various arrangements for work and cooperation.

The training is targeted at persons who provide or are going to provide guidance to adults on training and occupational choices. The requirements are youth education or equivalent qualifications, two general subjects at C level (see Section 2.2.3.3) and at least two years' relevant professional experience.

The adult counsellor's training course, offered under the Open Education Act (see Section 3.4.60), is a modular full-time or part-time course corresponding to one year's full-time study. An examination certificate is issued on completion of the course.

Chapter 6
Trends and perspectives

6.1. Introduction

In this chapter, we shall be discussing some general trends and key priorities in the field of vocational training in Denmark. The presentation concentrates on some key problem areas on which the political system is currently working — work which will bring about radical changes in vocational training. There will also be a brief discussion of some effects of EU policy initiatives and of the EU's training programmes.

6.2. Reform of technical vocational training

6.2.1.

Technical vocational training is not attracting enough young people. At the same time, the upper secondary school has been finding increasing favour, which is why there has been a shift in the recruitment base for vocational training over the past 20 years so that these courses now draw fewer trainees with strong school records. Besides, the drop-out rate on vocational training courses is too high — in both the school part and the practical part — and more needs to be done to help the less talented through the system. There is much to suggest that the very structure of courses is a formidable barrier to restoring recruitment to the desired levels and to remedying the drop-out problem and the exclusion of less able young people. The number of courses available is inordinately large, making it difficult to discern possible options; no account is taken of the fact that trainees have different capabilities; and courses offer too few possibilities of further training. For these reasons, intensive reform work is in progress in the Ministry of Education.

6.2.2.

A bill for a new reform will be introduced in the course of 1999. It is expected that the training structure will be altered in order to make the technical area more attractive in such a way that it becomes more intelligible, more transparent and more accommodating of different trainee backgrounds and prospects. Generally speaking, young people want to keep many options open while they train and test their abilities and interests, and it is felt that a more open and flexible structure would make a substantial contribution to solving the problems.

6.2.3.

The key innovation of the proposed legislation is a simplification of the routes of entry to vocational training. Young people wishing to embark on technical vocational training, from the year 2000, will only need to choose between six to seven different 'basic programmes' — for example, 'industry', 'craft trades', 'service trades' and 'transport' — compared with the 83 that exist at present. The basic programme (corresponding to the present first and second school periods') may take from six months to a year and a half, depending on the wishes and needs of the individual trainee. Here the trainees are introduced to the various options for further training. In addition, a very flexible and modular structure and organisation are proposed for the individual entry level, at which each trainee, over and beyond a number of compulsory core subjects, will choose and compose his own basic programme from the subjects available on admission to the course.

6.2.4.
After that, trainees will be able to choose from among the courses currently on offer in the 'main programme', which is built up on the following principles:

- the main programme alternates between school and on-the-job training;
- a training contract has been concluded or a school-based practical programme has been set up;
- the content consists of basic subjects, area subjects, special subject modules and optional subjects;
- the trainee is able to choose subjects qualifying for further study from among the optional subjects and can make use of distance learning in conjunction with practical training;
- special subjects are delivered in modular form. These special subjects may be either compulsory or optional (depending on the choice of the trainee or the enterprise);
- in order to enhance the interplay between school instruction and on-the-job training, a 'log book' will be introduced for the individual trainee;
- the main programme normally concludes with a trade-based examination, apprenticeship examination or the like.

6.2.5.
At the same time, the proposal calls for better provision for both academically weak and strong trainees. The teaching is to be organised in such a way that the weakest trainees are kept in the school part of the programme by giving them more time. If a trainee cannot cope with a complete vocational course, he or she must be given the opportunity to use what has been learned, in other words there are to be real possibilities of acquiring a formalised partial qualification. It is also proposed that possibilities be created for supplementing vocational training, either during a course or following on from it, by programmes conferring academic proficiency, so that trainees can acquire a double qualification (both vocational and academic) within the structure.

6.2.6.
A very interesting innovation is the consideration being given to creating content-based interaction between the special subjects of technical vocational training and adult and continuing training courses, especially the modular continuing training courses of the AMU system. In addition to a number of resource-related advantages, there are also content-related and pedagogical prospects for such a strategy. At the same time, it will establish natural continuity from basic training through to recurrent training in a lifelong perspective.

6.2.7.
The content of vocational training courses is currently determined by some 55 trade committees. In the AMU system, 50 continuing training committees lay down the objectives and content of over 2 000 modules. Optimum interaction will require coordination and simplification of this area but, as has already been pointed out, this development is supported by the increasing degree of coordination between the trade committees and continuing training committees and the fact that the same people often serve on both.

6.3. Lifelong learning

6.3.1.

The government has worked systematically for many years to organise adult and continuing training in such a way that education becomes a natural and recurrent part of working life. By way of the fast-track scheme to get young people into jobs and training (*Hurtigere i job og uddannelse*), launched in autumn 1995, and subsequent legislative changes in almost all areas relating to adult and continuing training, the government has set up structures for the training effort itself. The aim of adult and continuing training is to offer good and relevant training to all adults who need it. Lifelong training for all has been a political commitment in Denmark for many years, one of the key documents being the Ministry of Education's 'Ten-point plan' for recurrent training. For that very reason, the European Year of Lifelong Learning was considered a good opportunity for an exchange of experience between the EU countries.

6.3.2.

The key principles of recurrent adult training are as follows:

- free entry — schools and centres can accept all participants who meet the admission requirements;
- demand-led operation — public funding of individual training schemes, courses and schools must in future be determined by the demand from individuals, enterprises and employees, where that is not already the case;
- payment by participants — to be adjusted in such a way that it is lowest for those with a low standard of education taking broad courses which confer general qualifications and highest for persons of a high standard of education taking more specific courses.

6.3.3.

If both youth education and adult and continuing training schemes are to be determined by demand, there is a general need for schools to be market-oriented. The schools must be put in a position to react rapidly to the qualification needs of the labour market as reflected in the demand for training and courses emanating from students, course participants, enterprises and the regional labour market councils.

6.3.4.

The system of grants for adult training is so complicated that a reform is now demanded by the Danish Confederation of Trade Unions (LO). There are currently four schemes to assist unemployed or employed persons who need continuing training:

- the AMU course allowance;
- the training allowance;
- training leave; and
- adult education funding (VUS).

They are intended for different groups on the labour market and for different types of training. LO therefore proposes that instead all Danes be offered the opportunity of one year's training leave on maximum benefit within a five-year period — all other forms of training allowance can then be scrapped.

6.4. New parallel competence system for adult training schemes

With a view to creating greater incentives for adult participation in continuing and further training, the Minister for Education in October 1996 presented a discussion paper on courses and continuing training. The intention was to give adults on the labour market the same opportunities as young people to take up new job and training challenges. In the future, they should be able to gain recognition both for vocational experience and for course participation and personal qualifications and hence acquire genuine study and job proficiency. Such a system would pave the way for lifelong learning for all with a constantly rising level of qualification.

6.4.1.

It is estimated that 80 % of adult training on offer today does not confer any formal qualification. By introducing a kind of points system ('unit-credit accumulation system'), the Minister for Education proposes that it should be possible to put together qualification programmes which, in combination with practical vocational experience, will enable participants to progress to a level at which they can sit examinations.

6.4.2.

The practical details of the new system are currently being hammered out. The social partners are involved in the work and have a role to play in setting targets for practical skills and in assigning credit to the vocational experience gained. The new adult training proficiency must have national recognition, if it is to serve as a qualification standard on the labour market or as a basis for continued training. In crucial areas, the proposal breaks with existing principles relating to the organisation and management of vocational training by the social partners. The reform considerations detailed above (Section 6.1), under which the intention is to create a common basis for young people and adults in the form of course modules which can be integrated both in labour market training schemes and in specialised courses in the vocational training system, is a concrete step towards the establishment of a flexible training system supporting the principle of lifelong learning.

6.5. Training institutions for the 21st century

6.5.1.

A reform of the institutional structure of further education is underway. Compared with the situation in other countries, the institutional map of education in Denmark is characterised by a relatively large number of small establishments scattered over the whole country. There are currently 195 further education institutions, including 12 universities, 117 establishments offering medium-length courses (MVU) and 66 offering short courses (KVU). A total of 169 institutions only offer training within one specific vocational area ('mono-institutions').

6.5.2.

For comparison purposes, it may be mentioned that the other Nordic countries each have some 30 educational institutions. Furthermore, the average number of students in the neighbouring countries is 5 000–7 000, whereas the figure in

Denmark is a little over 800. The government target according to which 50 % of a class-year of young people must go on to further education has stimulated discussion as to whether the present institutional structure is in the best position to handle such growth.

The Ministry of Education is working on proposals for two models for a future institutional structure.

- Under one model, it is proposed that training be pooled in centres for further education (*centre for videregående uddannelse*) — the 'CVU' model. This can be achieved, for example, by placing vocational schools and MVU establishments in one institutional framework or by placing KVU (shorter further training) courses in an institution formed by mergers with MVU (medium-length further training) establishments. A CVU could be set up through a merger between MVU establishments exclusively. It might be possible to confer bachelor status on MVU courses at the establishments, in which case admission to bachelor courses would have to be possible on the basis of KVU courses. The intention in setting up a CVU sector is partly to give a pledge of occupational quality and stimulate development possibilities through interdisciplinary environments, partly to create attractive regional education centres outside the university towns, and partly to provide an alternative to the universities which can absorb some of the rising population of potential further education students.
- The second model, the 'University model', is based on mergers between universities and MVU establishments. This would be expected to result in a total of approximately 10–12 universities with a number of geographically dispersed departments. The universities could have a bias towards research-based training and/or they could be more vocationally oriented universities. MVU courses at the merged institutions would be able to acquire bachelor status. Under provisions enshrined in an executive order, KVU courses would confer merit for relevant MVU and diploma courses.

6.5.3.

The Ministry of Education would like these mergers to take place voluntarily on the basis of regional considerations and interests. The reform is expected to be implemented over a period of five to seven years. The legislative approach, with implicit coercion, will not really arise. Instead, it is expected that a combination of measures will be applied involving a reduction in grants to small establishments and incentives in the form of extra grants for development, training and research reserved for merged institutions.

6.6. Internationalisation and the significance of the EU

6.6.1.

Internationalisation is an increasingly important area of development for business and industry, hence also for vocational training. Thus, a crucial challenge to schools is to plan the international dimension into the concrete development of courses and the organisation of training and teaching. Many vocational schools and AMU centres as well as trade committees and continuing training committees have already been involved in activities related to EU programmes. In this way, many teachers and students have become acquainted with international factors of relevance to their courses.

6.6.2.
In its status report of February 1997, the Vocational Training Advisory Council draws attention to a general need for a consistent and targeted strategy of quality development in the internationalisation of vocational training, with a view to promoting the integration of the international dimension into vocational training courses. In 1997, the Ministry of Education presented a report to Parliament on strategies for the development of the international dimension in education (*Strategier for udvikling af den internationale dimension i uddannelserne*), in which the future development strategy is described. An overall strategy plan for the vocational training sector was subsequently developed.

6.6.3.
An international initiative, which has been a great success with trainees at vocational schools, is the PiU scheme (*Praktik i Udlandet* — Work Experience Abroad). Through this scheme, which is enshrined in legislation through an amendment to the act on vocational training, it is possible for young people, either with or without a Danish practical training place, to spend time abroad as part of a Danish vocational training course. This facility for practical experience abroad is supported financially through the AER scheme (*Arbejdsgivernes Elevrefusion* — which reimburses employers for trainees' wages). Experience from these assignments abroad has shown that most trainees return home to their Danish firms more mature and with a wealth of cultural and linguistic experience, while at the same time their work experience has given them knowledge of their chosen disciplines from entirely new angles.

6.6.4.
Another interesting development is the refinement and updating of vocational training and labour market training courses through participation in European action programmes in the educational field. Many Danish vocational schools take part in these EU programmes, which set up cooperation networks for participation in joint projects. These networks have given rise to innovative developments in both course content and teaching methods. A range of more permanent cooperation and development agreements have been concluded with institutions in other countries — and new ones are constantly being concluded — through a decentralised system within which the schools and training centres themselves choose to cooperate.

6.6.5.
The true benefits of participation in EU educational programmes have not been fully explored in Denmark as yet. One such programme has been looked at however: the significance of the Leonardo da Vinci programme was examined in an interim evaluation in 1997. Here the criterion was that projects should promise to be innovative, and a detailed review of all the Danish projects approved indicates that this was the case for most projects. The general problem of development models based on pilot projects, national as well as international ones, is the risk of 'encapsulated knowledge' which is highly enriching for those who take part, but only has a limited effect on surrounding systems. The Danish study established the following criteria for the assessment of possible system effects stemming from project activities under the Leonardo da Vinci programme:

- degree of linkage to vocational training systems;
- dissemination of results;
- creation of agents of change.

6.6.6.

Assessed on this basis, the probable results of the Leonardo da Vinci programme in Denmark look very promising. To begin with, a number of project coordinators are key figures in the Danish vocational training system. They are thus in an excellent position to disseminate information and implement innovations produced by a Leonardo da Vinci project at national level. Secondly, experience shows that many projects make deliberate use of transnational project meetings in order to arrange national information dissemination conferences right from the start, with involvement of special-interest organisations, vocational schools, enterprises, etc. Thirdly, through participation in and management of transnational projects, highly competent agents for change are created, a process which the Danish Centre for International Training Programmes (ACIU), the Danish programme coordination unit, has moreover actively supported by arranging special workshops and conferences for potential and already active project managers. Fourthly, the special tripartite management structure of ACIU offers an assurance of strong national cooperation on Leonardo da Vinci activities between the ministries and the social partners.

Annexes

Annex 1

Abbreviations and acronyms

ACIU	Arbejdsmarkedets Center for Internationale Uddannelsesaktiviteter Danish Centre for International Training Programmes
AER	Arbejdsgivernes Elevrefusion Employers' scheme for the reimbursement of trainees' wages
AF	Arbejdsformidlingen Public Employment Service (service responsible for establishing contact between job seekers and job providers and general implementation of labour market policy measures)
AMU	Arbejdsmarkedsuddannelserne Adult vocational training schemes/labour market training courses
AMS	Arbejdsmarkedsstyrelsen National Labour Market Authority
AVU	Almen voksenuddannelse General adult education
CVT	Continuing vocational training Erhvervsrettet efteruddannelse
CVU	Center for Videregående Uddannelse Centre for Further Education
DA	Dansk Arbejdsgiverforening Danish Employers' Confederation
DEL	Danmarks Erhvervspædagogiske Læreruddannelse Danish Institute for Educational Training of Vocational Teachers
EFG	Erhvervsfaglig grunduddannelse Initial vocational education and training (IVET)
EFU	Afdelingen for erhvervsfaglige uddannelser Vocational Training Department
EGU	Erhvervsgrunduddannelse Basic vocational training
ESA	Erhvervsskoleafdelingen i Undervisningsministeriet Vocational school department of the Ministry of Education
ESF	European Social Fund
EUD	Erhvervsuddannelserne Vocational education and training schemes/courses

EUR	Erhvervsuddannelsesrådet Vocational Training Advisory Council
FUU	Den frie ungdomsuddannelse Free youth education
HD	Handelshøjskolens Diplomprøve Diploma examination and education at the School of Economics and Business Administration
HF	Højere Forberedelseseksamen Higher preparatory examination
HG	Handelsskolens grunduddannelse Basic commercial education and training
HHX	Højere Handelseksamen Higher commercial examination (vocational upper secondary level)
HI	Handelskolernes Introduktionsforløb Introductory course for training at commercial schools
HS	Handelsskolen Commercial/business college or school
HTX	Højere Teknisk Eksamen Higher technical examination (vocational upper secondary level)
ICU	Informationscentret for studie- og udvekslingsrejser Information Centre for International Study and Exchange
IDV	Indtægtsdækket virksomhed (på AMU-centrene) Revenue-funded activity (courses at AMU centres entirely funded by enterprises requesting them)
KVU	Kortere videregående uddannelser Shorter further education courses
LO	Landsorganisationen i Danmark Danish Confederation of Trade Unions
LVU	Længerevarende videregående uddannelser Longer further education courses
MVU	Mellemlange videregående uddannelser Medium-length further education courses
PGU	Pædagogisk grunduddannelse Basic training in child care
PiU	Praktik i Udlandet Work Experience Abroad

RAR	Regionale arbejdsmarkedsråd Regional labour market council
R.U.E	Rådet for Uddannelses- og Erhvervsvejledning Council for Educational and Vocational Guidance
SEL	Statens Erhvervspædagogiske Læreruddannelse (now DEL, see above)
SOSU	Social- og sundhedsuddannelserne Social welfare and health training schemes
SU	Statens Uddannelsesstøtte State Educational Grant and Loan Scheme
TAMU	Træningsskolen ved AMU Training school for young people with learning difficulties in the AMU system
TI	Teknisk introduktionsforløb ved de tekniske skoler Introductory course for training at technical schools
TS	Teknisk skole Technical school/college
UJF	Uddannelses- og jobkvalificerende forløb Training and job qualification programme
UTA	Det særlige program 'Uddannelse til alle unge' Special programme 'Education for all young people'
VEUD	Voksenerhvervsuddannelser Adult vocational education and training courses
VTP	Virksomhedstilpassede kurser på AMU-centre Enterprise-adapted courses (courses tailored to firms' requirements) at AMU centres
VUC	Voksenuddannelsescentre Adult education centres

Important institutions and organisations

Ministry of Education
Frederiksholms Kanal 21
DK-1220 København K
Tel. (45) 33 92 50 00
Fax (45) 33 92 55 47
E-mail: uvm@uvm.dk
Home page: http://www.uvm.dk

Ministry of Labour
Holmens Kanal 20
DK-1060 København K
Tel. (45) 33 92 59 00
Fax (45) 33 12 13 78
E-mail: am@am.dk
Home page: http://www.am.dk

National Labour Market Authority (AMS)
Blegdamsvej 56
DK-2100 København Ø
Tel. (45) 35 28 81 00
Fax (45) 35 36 24 11
E-mail: ams@ams.dk
Home page: http://www.ams.dk

Danish Employers' Confederation (DA)
Vester Voldgade 113
DK-1700 København V
Tel. (45) 33 38 90 00
Fax (45) 33 12 29 76
E-mail: da@da.dk
Home page: http://www.da.dk

Danish Confederation of Trade Unions (LO)
Rosenørns Allé 12
DK-1634 København V
Tel. (45) 35 24 60 00
Fax (45) 35 24 63 00
E-mail: lo@lo.dk
Home page: http://www.lo.dk

Danish Institute for Educational Training of Vocational Teachers (DEL)
Rosenørns Allé 31
DK-1970 Frederiksberg C
Tel. (45) 35 24 79 50
Fax (45) 35 24 79 40
E-mail: del-adm@delud.dk
Home page: http://www.delud.dk

Employers' scheme for the reimbursement for trainees' wages (AER)
ATP-huset
Kongens Vænge 8
DK-3400 Hillerød
Tel. (45) 48 20 48 20
Fax (45) 48 20 48 00
E-mail: aer@atp.dk
Home page: http://www.atp.dk

Danish Centre for International Training Programmes (ACIU), now Centre for Internationalisation, Cooperation and Mobility in Education and Training (Cirius)
Fiolstræde 44
DK-1171 København K
Tel. (45) 33 95 70 00
Fax (45) 33 95 70 01
E-mail: cirius@ciriusmail.dk
Home page: http://www.ciriusonline.dk

Council for Educational and Vocational Guidance (R.U.E.)
Vester Voldgade 123
DK-1552 København V
Tel. (45) 33 95 53 00
Fax (45) 33 95 53 49
E-mail: r-u-e@r-u-r.dk
Home page: http://www.icu.dk

National Centre for Quality and Competence Development (SCKK)
Laksegade 19
DK-1063 København K
Tel. (45) 33 95 69 70
Fax (45) 33 95 69 79
E-mail: sckk@sckk.dk
Home page: http://www.sckk.dk

Annex 3

Sources

A. English-language references and databases

Arbejdsmarkedsstyrelsen: *Trends in international migration to Denmark, Sopemi report to OECD, Denmark*, 1996.
Arbejdsministeriet: *Labour market policy in transition*, 1996.
Kjær Andersen, A.: *Youthstart, measures in favour of the Youthstart target group, Denmark*, DEL, 1996.
Undervisningsministeriet: *The Danish vocationally oriented general upper secondary education programmes, general rules*, 1997.
Undervisningsministeriet: *Act on formal adult education*, UVM 11-003.
Undervisningsministeriet: *The Educator training programme*, UVM 30-026.
Undervisningsministeriet: *Facts and figures*. Education indicators Denmark 1996, UVM 31-020.

Publications may be ordered from the relevant ministry by post, fax, telephone or e-mail. See addresses in Annex 2.

B. Online resources

The adult education and continuing training reform 2000, Danish Ministry of Education, 2001. Available online:
http://www.uvm.dk/eng/publications/factsheets/veureform.htm

The basic social and health education programmes — Factsheet, Danish Ministry of Education, 2000. Available online:
http://www.uvm.dk/eng/publications/factsheets/fact8.htm

Denmark's strategy for education, learning and IT: Parts 1 and 2 — We must move on, Danish Ministry of Education, 2001. Available online: http://www.it-strategi.uvm.dk

Educational and vocational guidance in Denmark, R.U.E, 2001. Available online: http://www.r-u-e.dk

Eurostat Yearbook 2001, Eurostat, 2001. Available online:
http://www.europa.eu.int/comm/eurostat/Public/datashop/print-catalogue/EN?catalogue=Eurostat&service=free_downloads

Facts and figures — education indicators, Danish Ministry of Education, 2000. Available online: http://www.uvm.dk/pub/2000/factsfig/

Financing of education in Denmark, Danish Ministry of Education, 2000. Available online: http://www.uvm.dk/eng/publications/factsheets/taximeter.htm

National actions to implement lifelong learning in Europe, Eurydice and Cedefop, 2001. Available online: http://www.eurydice.org

National Labour Market Authority: at a glance, National Labour Market Authority, 2000. Available online: http://www.ams.dk/publikationer/pub0114/

Thematic review on adult learning, OECD, 2001. Available online: http://www.oecd.org/copyr.htm/

Vocational education and training — Factsheet, Danish Ministry of Education, 2000. Available online: http://www.uvm.dk/eng/publications/factsheets/fact3.htm

C. Background literature

Andersen, Allan Kjær og Søren P. Nielsen: *Leonardo da Vinci — Article 10 Report*, 1997. Available in English.

Arbejdsmarkedsstyrelsen: *AMU for fremtiden — om uddannelserne fra 97*, 1997.

Arbejdsmarkedsstyrelsen: *Årsberetning 1996*, 1997.

Arbejdsministeriet: *Arbejdsmarkedspolitisk rapport 1996*, 1996.

Danmarks Statistik: *Danmark i Tal 1998*.

Danmarks Statistik: *Deltagelse i voksen- og efteruddannelse 1997*, Uddannelse og kultur 1998:6, 1998.

Danmarks Statistik: *Elever ved de erhvervsfaglige uddannelser 1. oktober 1995–30. september 1996*, Uddannelse og kultur 1997:9, 1997.

Danmarks Statistik: *Elever ved korte videregående uddannelser 1. oktober 1995–30. september 1996*, Uddannelse og kultur 1997:10, 1997.

Danmarks Statistik: *Statistisk Årbog 1998* (Statistical Yearbook). Available in English.

Danmarks Statistik: *Udviklingen i uddannelsessystemet 1985–1995*, Uddannelse og kultur 1997:3, 1997.

Danmarks Statistik: *Åben uddannelse ved erhvervsskolerne i skoleåret 1996/97*, Uddannelse og kultur 1998:9, 1998.

Danmarks Statistik og Socialforskningsinstituttet: *Levevilkår i Danmark 1997*.

Dansk Arbejdsgiverforening: *Nye merkantile erhvervsuddannelser*, DA information, 1996.

Dansk Industri: *Industriens hovedtal 96*, 1996.

The Economist: *Country report: Denmark*, 1997.

Finansministeriet: *Budgetredegørelse*, 1997.

Finansministeriet: *Danmark som foregangsland — uddannelse: omkostninger og resultater*, 1997.

Finansministeriet: *Finanslov 1997*.

Grothen & Perregaard: *Pinsepakken juni 1998*.

Implementering af den nye HG, Handelsskolen 3/96, 1996.

Landsorganisationen i Danmark: *Øje på beskæftigelsen*, 1997.

Nielsen, Søren P.: *Vocational education and training in Denmark*, Cedefop monograph, 1994.

OECD Economic surveys: *Denmark*, 1997.

OECD: *Employment outlook*, July 1992, 1997 and 1998.

R.U.E.: *Erhvervsuddannelser efter 9. og 10. klasse*, 1995/96.

R.U.E.: *Oplæg til drøftelse af fremtidens vejledningsindsats*, 1998.

Samfundsstatistik 1997, Columbus, 1997.

Sysdem Trends No 30, Summer 1998.

Undervisningsministeriet: *Tiltag og reformer på uddannelsesområdet*, 1997.

Undervisningsministeriet: *Uddannelsesredegørelse*, 1997.

Undervisningsministeriet, Datakontoret: *Uddannelse og arbejdsmarked 1990–2017*, 1993.

Undervisningsministeriet, Erhvervsskoleafdelingen: *Bedre praktikuddannelse — social- og sundhedsuddannelserne*, FoU-publikation nr. 15, 1997.

Undervisningsministeriet, Erhvervsskoleafdelingen: *Brobygning — samarbejde, pædagogik, vejledning*, Temahæfte nr. 5-97, 1997.

Undervisningsministeriet, Erhvervsskoleafdelingen: *Brobygning mellem grundskolen og ungdomsuddannelserne — Betænkning nr. 1281*, 1994.

Undervisningsministeriet, Erhvervsskoleafdelingen: *Erhvervsgrunduddannelse — egu — status 1995*, Temahæfte 7-95, 1995.

Undervisningsministeriet, Erhvervsskoleafdelingen: *Erhvervsskolernes internationale muligheder — status og strategier*, FoU-publikation nr. 5, 1998.

Undervisningsministeriet, Erhvervsskoleafdelingen: *Praktikpladssituationen Ultimo februar 1998*, ESA statistik nyt nr. 4, 1998.

Undervisningsministeriet, Erhvervsskoleafdelingen: *Udredning om erhvervsskolernes praktikpladsopgaver — Sammenfatningsrapport*, Temahæfte 10-97, 1997.

Undervisningsministeriet, Erhvervsskoleafdelingen: *Undersøgelse af ungeindsatsen på erhvervsskolerne — organisering og nye uddannelsesmuligheder*, FoU-publikation nr. 4, 1998.

Undervisningsministeriet, Folkeskoleafdelingen: *Uddannelses-, erhvervs- og arbejdsmarkedsorientering*, 1995.

Undervisningsministeriet, Statistik- og Analysefunktionen: *Uddannelse på kryds og tværs*, 1997.

Undervisningsministeriets Nyhedsbrev, årgang 1996–98.

Økonomiministeriet: *Økonomisk oversigt*, 1997 and October 1998.

Annex 4

Definition of some key terms

This short list of terms and their use in the report has been drawn up by the author. It makes no claim to be an authoritative terminological work. In this connection, the reader is referred to Cedefop's current activities in the field of terminology and vocational training.

AMU-uddannelse/AMU training:
Training geared to the labour market for adults who have already completed a course of basic vocational education, but aimed at updating knowledge and skills.

Arbejdsformidlingen/Public Employment Service:
Locally based government authorities responsible for establishing contact between job seekers and job providers, for employment arrangements and for the general implementation of labour market policy measures.

Arbejdsløshed/Unemployment:
That part of the labour force which is without employment. Long-term unemployment in Denmark is defined as applying to persons unemployed for 80 % of one year or longer.

Betænkning/Report:
As part of the preparation of a new legislative initiative, a commission is often appointed by the minister responsible. The commission's terms of reference are set by the minister. The commission delivers a report presenting the results of its deliberations and possibly the draft of a bill to be put before Parliament.

Datanom:
Holder of a diploma in computer science. Training consists of a short further education course (KVU) of three years' duration on a part-time basis. It is for adults with basic vocational training and working experience. The teaching takes place at commercial schools as evening classes and concludes with a State-controlled examination. It has a modular structure.

Efterskoler/Continuation schools:
These schools take pupils in the 14 to 18 age range and offer an alternative to the 8th–10th class of primary and lower secondary school. They are boarding schools and offer the same subjects as the primary and lower secondary schools plus creative and practical subjects. They are referred to as 'free' schools and have their origins in the folk high schools.

Efteruddannelsesudvalg/Continuing training committees:
Joint committees which draw up teaching plans for AMU courses and monitor qualification trends in a trade or industry. A total of about 50 continuing training committees have been set up.

Erhvervsfaglig grunduddannelse — EFG/Basic vocational training:
Basic training in occupational fields which is introduced by a basic year spent at a vocational school (technical or commercial school), followed by alternance training. In this part, the trainee concludes a training contract with an enterprise providing practical experience and continues the course alternating between school and enterprise.

Erhvervsskoler/Vocational schools/colleges:
Vocational training takes place at vocational schools, of which there are 120. Half of these are technical schools and half commercial schools. There are also 27 agricultural schools and 34 social welfare and health care schools. These schools are managed by boards and organised as autonomous institutions.

Erhvervsuddannelse/Vocational training:
Training which confers professional/occupational competence by providing specific professional or trade qualifications, which prepare the trainee to pursue an occupation.

Faglige udvalg/Trade committees:
Joint committees of the social partners set up to deal with questions regarding the duration, structure, aims and assessment criteria of individual courses. They draw up executive orders for each course and approve enterprises for practical training. They play a key role in the Danish vocational training system.

Grunduddannelse/Basic training:
Training courses conveying the basic knowledge and skills for a given occupation. A fundamental rule of basic training is that it should immediately confer a standard of proficiency by qualifying the newly trained individual to perform particular functions.

Gymnasiale uddannelser/Upper secondary education:
School education following on from primary and lower secondary school, normally of three years' duration, giving access to higher education. In Denmark, there are four types: the general *gymnasium* or upper secondary school, the higher preparatory examination (HF), higher commercial examination (HHX) and higher technical examination (HTX).

Hovedbekendtgørelse/Principal executive order:
Basic vocational training courses are governed by executive orders for education. These must conform to the principal executive order, which sets the framework and content of the individual executive orders.

Indtægtsdækket virksomhed/IDV revenue-funded activity:
IDV courses are paid for by the firms commissioning them, who in return receive tailor-made training packages matching their needs. Vocational schools as well as AMU centres provide an increasing number of user-specified packages.

Kombinationsaftale/Combination agreement:
In the alternance training system, two thirds of the training takes place at an enterprise providing work experience on the basis of a training contract. Several firms may be involved, depending on the scope of the training, and in that case a 'combination agreement' is concluded with the participating training enterprises.

Merkonom:
Holder of a diploma in specialised business studies. Training consists of a short further education course (KVU) of three years' duration on a part-time basis, taking the form of evening classes at commercial schools. It is for adults with basic vocational training and working experience. The course, which has a modular structure, concludes with a State-controlled examination. *Merkonom* training is very extensive in its scope.

Mål- og rammestyring/Management by objectives:
Control of vocational training has been decentralised through the introduction of management by objectives. The objectives for the training and the framework within which the objectives must be achieved are set at central level. The schools have freedom of action within these constraints, with a view to achieving the objectives in the most appropriate way.

Samordnet tilmelding/Coordinated enrolment:
In the final years of primary and lower secondary school, enrolment on youth education courses (vocational training and upper secondary education) is coordinated. Application forms and guidance are sent from the Ministry of Education in February to all schools with pupils in the 9th and 10th classes. Pupils submit the same form, regardless of their choice of education.

Selvejende institution/Autonomous institution:
Institution which owns the capital on which its operation is based, i.e. it is not owned or managed by investors of capital. The composition of management is laid down in the statutes of the enterprise, as are the rules applying to use of profits. Vocational schools are organised as autonomous institutions with their own capital, but are almost entirely financed by public funds.

Skoleperiode/School period:
Vocational training alternates between school attendance and on-the-job training. Attendance at school is divided into periods of varying duration and number, depending on the course.

Studievejleder/Training counsellor:
A teacher who has qualified through continuing training to guide students in their choice of training and occupation. The function exists both at primary and lower secondary schools and at vocational schools.

Taxameterprincip/Taxi-meter principle:
Grant system geared to activity, in which the number of students determines the size of a school's allocation. The basis of the system is referred to as the 'taxi-meter' principle because it has two components: a record of 'kilometres travelled' (number of students being trained) and a 'fare per kilometre' (rate per student).

Teknonom:
Holder of diploma in specialised technological studies. Training is provided at technical schools in the form of a modular three-year part-time evening course and concludes with a State-controlled examination. Requirements for admission are training as a skilled worker and several years' occupational experience.

Uddannelsesbekendtgørelse/Executive training order:
Implementing measure provided for in an act and applicable to both individual members of the public and the administrative authorities. The 85 new vocational training courses are specified by executive orders laying down the objectives and framework for each course.

Uddannelseskontrakt/Training contract:
The legal relationship between an apprentice or trainee and the training enterprise is regulated by a formal training contract, which must comply with a number of

rules drawn up by the Ministry of Education. It is a condition for the completion of vocational training that a training contract be signed between the trainee and one or more enterprises. It must cover all the periods of practical training and school attendance required by the training, including any final apprentice's examination.

Ungdomsuddannelser/Youth education:
Education for young people aged 16 to 19, following on from the 9th or 10th class of primary and lower secondary school. A distinction is made between upper secondary education (*gymnasium*) and vocational training.

Vekseluddannelse/Alternating training:
Vocational training consisting of a predetermined pattern of alternation between on-the-job training in enterprises and participation in theoretical and practical classes at a vocational school. Vocational training in Denmark follows the 'dual' system, i.e. is organised as alternance training.

Videreuddannelse/Further education/training:
Education or training aimed at raising vocational proficiency to a level higher than that of basic education or training.

Voksenuddannelse/Adult education:
Education or training for adults, normally understood to mean participation in general education, but used here with particular reference to vocational training for adults.

Åben uddannelse/Open education:
Open education comprises, on the one hand, vocational training courses specially designed for adults and, on the other hand, a specially adapted form of ordinary vocational training. The principle is that the participant only has to take that part of the training which he or she is interested in or has a need for. The participant cannot claim any publicly funded training allowance and must pay part of the training costs through course fees. The training courses offered must be flexible, and it must be possible to combine them with full-time employment.

Annex 5

Recent initiatives

A. The reform of basic vocational courses (Reform 2000)

In March 1999 the Danish Parliament, the *Folketing*, adopted an act on changes to basic vocational courses ('Reform 2000'). The general purpose of the reform was to ensure up-to-date qualifications in the labour market, in particular including development of the personal qualifications of the individual student. At the same time, the reform was intended to make the system simpler and more transparent for users, and ensure them relevant options for leaving and taking additional units during their courses, thus ensuring that the percentage of dropouts among young people embarking on a vocational course is reduced as far as possible.

The reform covers both structural and pedagogical aspects of the courses. The changes can be summarised under the following main points:

- there will be fewer entry points, so that the choice of course options is simplified;
- the courses will be modularised, so that the individual student him- or herself can arrange the course content to a higher degree;
- the concept of the 'class' was abolished and replaced by a contact teacher arrangement;
- a personal course plan is to be prepared for each student and a course book is to be kept for the entire course;
- teaching will be oriented more towards learning by doing;
- increased emphasis on 'personal' qualifications.

The reform will also mean a change in the role of the teacher (change from 'teacher' to 'consultant') and it is planned that teachers will work in teams to a greater extent. The structural changes also require increased cooperation between schools to ensure availability of the courses in question and their proper organisation.

Courses will be divided into basic and main programmes. During the basic programme the individual student will not have to make a decision on his/her final course, but will choose from among seven broad themes (entry points) which together cover all courses:

- technology and communication;
- construction and machinery;
- trade and technology;
- from soil to table (hotels, kitchens, foods, agriculture);
- mechanics, transport and logistics;
- service;
- the mercantile area (commerce, office work and finance).

It is possible to subdivide very broad points of entry into 'families', but all basic programmes must include enough general units to enable students to select another main programme later without having to start a new basic programme from the beginning. Depending on the student's qualifications, the basic programme can range from 10 to 60 weeks. In many respects the main programme will resemble the old courses of the third school period and afterwards, and as before, there will be 85 specialisation options. It will still be a prerequisite for entry into the main programme that the student has entered into an education agreement with a work experience place (or an agreement on schoolwork experience). It will similarly still be possible for the student to take all or parts of his or her work experience periods abroad under the PiU (Practical Training Abroad) scheme.

Students wishing to acquire additional expertise during their education will be able to take extra units. They can, for example, supplement their course with units from other subject areas, or they can take basic units at a higher level than required by law. This also opens the possibility of a student's gaining double qualifications, and thus taking both a commercial course and a general course, which can be used if he/she subsequently wishes to commence a university course. Conversely, it will also be possible for students to take a smaller limited part of a complete trade course (acquiring partial expertise). This can, for example, be relevant for students with such poor academic abilities that they will not be able to finish a full course. It can also be relevant in the case of students who wish to compose an entirely individually arranged education across established courses.

Seen in relation to previous vocational training, one of the reform's decisive new features is the opportunity for the individual student him- or herself to put together an individual package on the basis of his/her abilities and interests and the courses offered by the school. The student will prepare a personal course plan to this end together with the contact teacher. This plan will be continuously updated and amended (as necessary) throughout the course by both parties. Later, during the main programme, the student's work experience will also contribute to this process. To ensure optimal communication among all parties, a course book will also be kept which links together, coordinates and documents learning during work experience and school periods.

Søren Kristensen
Cedefop
August 2000

B. Adult and continuing education reform

In spring 2000, the Danish Parliament adopted a reform of publicly financed adult and continuing education, the 'VEU' (Adult Vocational Training) reform, which will come into effect not later than 1 January 2001. The VEU reform has the general aim of giving greater priority to initiatives for early school leavers. The two education systems under the Ministry of Education and the Ministry of Labour must also cooperate more on the common goal of increasing the qualifications of early school-leavers so that the road ahead is not blocked by different education systems. Finally, the main aim is to make parties to the labour market more responsible financially for adult and continuing education, although the State will continue to a wide extent to finance these areas.

The point of departure remains to ensure relevant options for continuing education for all, but with a stronger priority for those groups who did not gain a good education when they were young. It also follows from this that companies will have a greater responsibility for the financing of those with a better education and for more business-oriented education.

The result of the priority accorded to early school-leavers will be that:

- more adult early school-leavers will be given an education at skilled level. The focal point is, among other things, a basic education for adults which, on the basis of job experience, will ensure the same expertise, and thus the same qualification profile, as in the ordinary education system at skilled level;
- relevant courses with recognised expertise will be guaranteed and developed for early school-leavers, including in relation to specific job functions;
- a number of adults who currently lack basic literacy and numeracy skills will gain these skills via a targeted effort within the courses for early school-leavers which are not directly vocationally oriented.

The reform must also be supported among other ways by:

- quality assurance, including evaluation;
- a general assessment of its results;
- strengthening coordination between course committees (adult vocational training centres) and continuing education committees (commercial and technical schools);
- harmonisation of financial management within vocationally oriented adult and continuing education so that competition and cooperation take place under the same conditions, and strengthened local cooperation among schools, including breaking down barriers against voluntary local school mergers.

Labour Market Educational Financing (AUF) will give the parties to the labour market opportunities for making recommendations to both the Minister for Education and the Minister for Labour on matters of significance for the financing and organisation of adult and continuing education. This new right will also be accompanied by the opportunity to increase efficiency and rationalise, so that the specialist and broad courses will come into focus. The AUF board can also recommend that companies themselves help to finance very small and specialised courses to a higher degree. The board also recommends that an employer contribution be imposed to help finance adult and continuing education initiatives. The contribution must, however, be implemented by act of Parliament.

In future, the allocation of funds for education will thus be more the responsibility of the labour market parties; the provision of new funds can therefore be based on collective employer contributions.

The primary focus for continuing education beyond skilled level is on a modularisation of basic, diploma and master's courses so that they can be used more as independent elements in short-term continuing education courses.

Sven-Åge Westphalen
Cedefop
August 2000

Cedefop — European Centre for the Development of Vocational Training

Vocational education and training in Denmark

Søren P. Nielsen and Pia Cort
The Danish Institute for Educational Training of Vocational Teachers

Luxembourg: Office for Official Publications of the European Communities

Second edition — 2002 — 144 pp. — 21 x 29.7 cm

ISBN 92-828-2258-3

Catalogue No: HX-21-99-795-EN-C

Price (excluding VAT) in Luxembourg: EUR 18.50

Publication number: 7006 EN

Venta • Salg • Verkauf • Πωλήσεις • Sales • Vente • Vendita • Verkoop • Venda • Myynti • Försäljning
http://eur-op.eu.int/general/en/s-ad.htm

BELGIQUE/BELGIË

Jean De Lannoy

Avenue du Roi 202/Koningslaan 202
B-1190 Bruxelles/Brussel
Tél. (32-2) 538 43 08
Fax (32-2) 538 08 41
E-mail: jean.de.lannoy@infoboard.be
URL: http://www.jean-de-lannoy.be

La librairie européenne/
De Europese Boekhandel

Rue de la Loi 244/Wetstraat 244
B-1040 Bruxelles/Brussel
Tél. (32-2) 295 26 39
Fax (32-2) 735 08 60
E-mail: mail@libeurop.be
URL: http://www.libeurop.be

Moniteur belge/Belgisch Staatsblad

Rue de Louvain 40-42/Leuvenseweg 40-42
B-1000 Bruxelles/Brussel
Tél. (32-2) 552 22 11
Fax (32-2) 511 01 84
E-mail: eusales@just.fgov.be

DANMARK

J. H. Schultz Information A/S

Herstedvang 12
DK-2620 Albertslund
Tlf. (45) 43 63 23 00
Fax (45) 43 63 19 69
E-mail: schultz@schultz.dk
URL: http://www.schultz.dk

DEUTSCHLAND

Bundesanzeiger Verlag GmbH

Vertriebsabteilung
Amsterdamer Straße 192
D-50735 Köln
Tel. (49-221) 97 66 80
Fax (49-221) 97 66 82 78
E-Mail: vertrieb@bundesanzeiger.de
URL: http://www.bundesanzeiger.de

ΕΛΛΑΔΑ/GREECE

G. C. Eleftheroudakis SA

International Bookstore
Panepistimiou 17
GR-10564 Athina
Tel. (30-1) 331 41 80/1/2/3/4/5
Fax (30-1) 325 84 99
E-mail: elebooks@netor.gr
URL: elebooks@hellasnet.gr

ESPAÑA

Boletín Oficial del Estado

Trafalgar, 27
E-28071 Madrid
Tel. (34) 915 38 21 11 (libros)
913 84 17 15 (suscripción)
Fax (34) 915 38 21 21 (libros),
913 84 17 14 (suscripción)
E-mail: clientes@com.boe.es
URL: http://www.boe.es

Mundi Prensa Libros, SA

Castelló, 37
E-28001 Madrid
Tel. (34) 914 36 37 00
Fax (34) 915 75 39 98
E-mail: libreria@mundiprensa.es
URL: http://www.mundiprensa.com

FRANCE

Journal officiel

Service des publications des CE
26, rue Desaix
F-75727 Paris Cedex 15
Tél. (33) 140 58 77 31
Fax (33) 140 58 77 00
E-mail: europublications@journal-officiel.gouv.fr
URL: http://www.journal-officiel.gouv.fr

IRELAND

Alan Hanna's Bookshop

270 Lower Rathmines Road
Dublin 6
Tel. (353-1) 496 73 98
Fax (353-1) 496 02 28
E-mail: hannas@iol.ie

ITALIA

Licosa SpA

Via Duca di Calabria, 1/1
Casella postale 552
I-50125 Firenze
Tel. (39) 055 64 83 1
Fax (39) 055 64 12 57
E-mail: licosa@licosa.com
URL: http://www.licosa.com

LUXEMBOURG

Messageries du livre SARL

5, rue Raiffeisen
L-2411 Luxembourg
Tél. (352) 40 10 20
Fax (352) 49 06 61
E-mail: mail@mdl.lu
URL: http://www.mdl.lu

NEDERLAND

SDU Servicecentrum Uitgevers

Christoffel Plantijnstraat 2
Postbus 20014
2500 EA Den Haag
Tel. (31-70) 378 98 80
Fax (31-70) 378 97 83
E-mail: sdu@sdu.nl
URL: http://www.sdu.nl

PORTUGAL

Distribuidora de Livros Bertrand Ld.ª

Grupo Bertrand, SA
Rua das Terras dos Vales, 4-A
Apartado 60037
P-2700 Amadora
Tel. (351) 214 95 87 87
Fax (351) 214 96 02 55
E-mail: dlb@ip.pt

Imprensa Nacional-Casa da Moeda, SA

Sector de Publicações Oficiais
Rua da Escola Politécnica, 135
P-1250-100 Lisboa Codex
Tel. (351) 213 94 57 00
Fax (351) 213 94 57 50
E-mail: spoce@incm.pt
URL: http://www.incm.pt

SUOMI/FINLAND

Akateeminen Kirjakauppa/
Akademiska Bokhandeln

Keskuskatu 1/Centralgatan 1
PL/PB 128
FIN-00101 Helsinki/Helsingfors
P./tfn (358-9) 121 44 18
F./fax (358-9) 121 44 35
Sähköposti: sps@akateeminen.com
URL: http://www.akateeminen.com

SVERIGE

BTJ AB

Traktorvägen 11-13
S-221 82 Lund
Tlf. (46-46) 18 00 00
Fax (46-46) 30 79 47
E-post: btjeu-pub@btj.se
URL: http://www.btj.se

UNITED KINGDOM

The Stationery Office Ltd

Customer Services
PO Box 29
Norwich NR3 1GN
Tel. (44) 870 60 05-522
Fax (44) 870 60 05-533
E-mail: book.orders@theso.co.uk
URL: http://www.itsofficial.net

ÍSLAND

Bokabud Larusar Blöndal

Skólavördustig, 2
IS-101 Reykjavik
Tel. (354) 552 55 40
Fax (354) 552 55 60
E-mail: bokabud@simnet.is

SCHWEIZ/SUISSE/SVIZZERA

Euro Info Center Schweiz

c/o OSEC Business Network Switzerland
Stampfenbachstraße 85
PF 492
CH-8035 Zürich
Tel. (41-1) 365 53 15
Fax (41-1) 365 54 11
E-mail: eics@osec.ch
URL: http://www.osec.ch/eics

BĂLGARIJA

Europress Euromedia Ltd

59, blvd Vitosha
BG-1000 Sofia
Tel. (359-2) 980 37 66
Fax (359-2) 980 42 30
E-mail: Milena@mbox.cit.bg
URL: http://www.europress.bg

CYPRUS

Cyprus Chamber of Commerce and Industry

PO Box 21455
CY-1509 Nicosia
Tel. (357-2) 88 97 52
Fax (357-2) 66 10 44
E-mail: demetrap@ccci.org.cy

EESTI

Eesti Kaubandus-Tööstuskoda

(Estonian Chamber of Commerce and Industry)
Toom-Kooli 17
EE-10130 Tallinn
Tel. (372) 646 02 44
Fax (372) 646 02 45
E-mail: einfo@koda.ee
URL: http://www.koda.ee

HRVATSKA

Mediatrade Ltd

Pavla Hatza 1
HR-10000 Zagreb
Tel. (385-1) 481 94 11
Fax (385-1) 481 94 11

MAGYARORSZÁG

Euro Info Service

Szt. István krt.12
III emelet 1/A
PO Box 1039
H-1137 Budapest
Tel. (36-1) 329 21 70
Fax (36-1) 349 20 53
E-mail: euroinfo@euroinfo.hu
URL: http://www.euroinfo.hu

MALTA

Miller Distributors Ltd

Malta International Airport
PO Box 25
Luqa LQA 05
Tel. (356) 66 44 88
Fax (356) 67 67 99
E-mail: gwirth@usa.net

NORGE

Swets Blackwell AS

Hans Nielsen Hauges gt. 39
Boks 4901 Nydalen
N-0423 Oslo
Tel. (47) 23 40 00 00
Fax (47) 23 40 00 01
E-mail: info@no.swetsblackwell.com
URL: http://www.swetsblackwell.com.no

POLSKA

Ars Polona

Krakowskie Przedmiescie 7
Skr. pocztowa 1001
PL-00-950 Warszawa
Tel. (48-22) 826 12 01
Fax (48-22) 826 62 40
E-mail: books119@arspolona.com.pl

ROMÂNIA

Euromedia

Str.Dionisie Lupu nr. 65, sector 1
RO-70184 Bucuresti
Tel. (40-1) 315 44 03
Fax (40-1) 312 96 46
E-mail: euromedia@mailcity.com

SLOVAKIA

Centrum VTI SR

Nám. Slobody, 19
SK-81223 Bratislava
Tel. (421-7) 54 41 83 64
Fax (421-7) 54 41 83 64
E-mail: europ@tbb1.sltk.stuba.sk
URL: http://www.sltk.stuba.sk

SLOVENIJA

GV Zalozba

Dunajska cesta 5
SLO-1000 Ljubljana
Tel. (386) 613 09 1804
Fax (386) 613 09 1805
E-mail: europ@gvestnik.si
URL: http://www.gvzalozba.si

TÜRKIYE

Dünya Infotel AS

100, Yil Mahallessi 34440
TR-80050 Bagcilar-Istanbul
Tel. (90-212) 629 46 89
Fax (90-212) 629 46 27
E-mail: aktuel.info@dunya.com

ARGENTINA

World Publications SA

Av. Cordoba 1877
C1120 AAA Buenos Aires
Tel. (54-11) 48 15 81 56
Fax (54-11) 48 15 81 56
E-mail: wpbooks@infovia.com.ar
URL: http://www.wpbooks.com.ar

AUSTRALIA

Hunter Publications

PO Box 404
Abbotsford, Victoria 3067
Tel. (61-3) 94 17 53 61
Fax (61-3) 94 19 71 54
E-mail: jpdavies@ozemail.com.au

BRESIL

Livraria Camões

Rua Bittencourt da Silva, 12 C
CEP
20043-900 Rio de Janeiro
Tel. (55-21) 262 47 76
Fax (55-21) 262 47 76
E-mail: livraria.camoes@incm.com.br
URL: http://www.incm.com.br

CANADA

Les éditions La Liberté Inc.

3020, chemin Sainte-Foy
Sainte-Foy, Québec G1X 3V6
Tel. (1-418) 658 37 63
Fax (1-800) 567 54 49
E-mail: liberte@mediom.qc.ca

Renouf Publishing Co. Ltd

5369 Chemin Canotek Road, Unit 1
Ottawa, Ontario K1J 9J3
Tel. (1-613) 745 26 65
Fax (1-613) 745 76 60
E-mail: order.dept@renoufbooks.com
URL: http://www.renoufbooks.com

EGYPT

The Middle East Observer

41 Sherif Street
Cairo
Tel. (20-2) 392 69 19
Fax (20-2) 393 97 32
E-mail: inquiry@meobserver.com
URL: http://www.meobserver.com.eg

MALAYSIA

EBIC Malaysia

Suite 45.02, Level 45
Plaza MBf (Letter Box 45)
8 Jalan Yap Kwan Seng
50450 Kuala Lumpur
Tel. (60-3) 21 62 92 98
Fax (60-3) 21 62 61 98
E-mail: ebic@tm.net.my

MÉXICO

Mundi Prensa México, SA de CV

Río Pánuco, 141
Colonia Cuauhtémoc
MX-06500 México, DF
Tel. (52-5) 533 56 58
Fax (52-5) 514 67 99
E-mail: 101545.2361@compuserve.com

SOUTH AFRICA

Eurochamber of Commerce in South Africa

PO Box 781738
2146 Sandton
Tel. (27-11) 884 39 52
Fax (27-11) 883 55 73
E-mail: info@eurochamber.co.za

SOUTH KOREA

The European Union Chamber of Commerce in Korea

5th Fl, The Shilla Hotel
202, Jangchung-dong 2 Ga, Chung-ku
Seoul 100-392
Tel. (82-2) 22 53-5631/4
Fax (82-2) 22 53-5635/6
E-mail: eucck@eucck.org
URL: http://www.eucck.org

SRI LANKA

EBIC Sri Lanka

Trans Asia Hotel
115 Sir Chittampalam
A. Gardiner Mawatha
Colombo 2
Tel. (94-1) 074 71 50 78
Fax (94-1) 44 87 79
E-mail: ebicsl@sinet.lk

T'AI-WAN

Tycoon Information Inc

PO Box 81-466
105 Taipei
Tel. (886-2) 87 12 88 86
Fax (886-2) 87 12 47 47
E-mail: eutupe@ms21.hinet.net

UNITED STATES OF AMERICA

Bernan Associates

4611-F Assembly Drive
Lanham MD 20706-4391
Tel. (1-800) 274 44 47 (toll free telephone)
Fax (1-800) 865 34 50 (toll free fax)
E-mail: query@bernan.com
URL: http://www.bernan.com

ANDERE LÄNDER
OTHER COUNTRIES
AUTRES PAYS

Bitte wenden Sie sich an ein Büro Ihrer Wahl/Please contact the sales office of your choice/Veuillez vous adresser au bureau de vente de votre choix

Office for Official Publications of the European Communities
2, rue Mercier
L-2985 Luxembourg
Tel. (352) 29 29-42455
Fax (352) 29 29-42758
E-mail: info-info-opoce@cec.eu.int
URL: publications.eu.int

3/2002

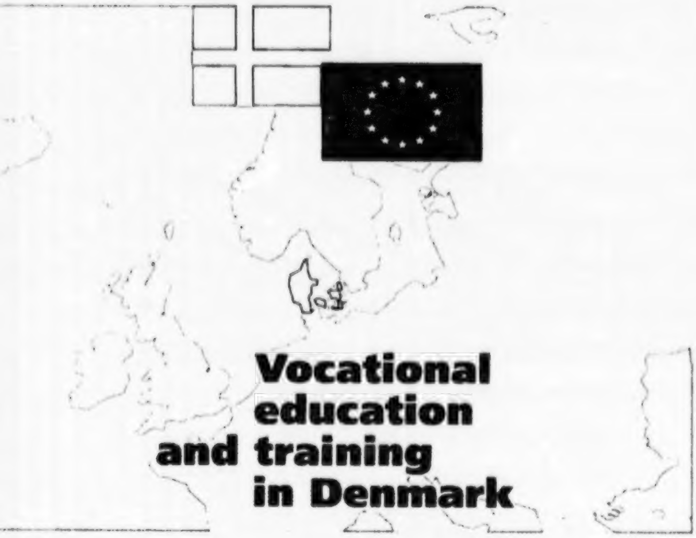
BEST COPY AVAILABLE

Cedefop — European Centre for the Development of Vocational Training
Europe 123, GR-57001 Thessaloniki (Pylea)

Postal address:
PO Box 22427, GR-55102 Thessaloniki

Tel. (30) 310 490 111
Fax (30) 310 490 020
E-mail: info@cedefop.eu.int
Home page: www.cedefop.eu.int
Interactive web site: www.trainingvillage.gr

CEDEFOP



Vocational education and training in Denmark

Price (excluding VAT) in Luxembourg: EUR 18.50

ISBN 92-828-2258-3

OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg

7006 EN

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC
Educational Resources Information Center

NOTICE

Reproduction Basis

☒ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (1/2003)